

# The Mining Journal

## RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 796.—Vol. XX.]

LONDON, SATURDAY, NOVEMBER 23, 1850.

[PRICE 6D.]

Stannaries of Cornwall.—In the Vice-Warden's Court.

RICHARDS v. BRANSCOMBE.

SAME v. GILBERT.

IN RE WEST TOLGUS AND TRELOWETH MINE.

**NOTICE IS HEREBY GIVEN**, that pursuant to the several Orders or Decrees, made in the above-mentioned causes, and bearing date respectively the 6th day of November inst., a PUBLIC AUCTION will be held at Andrew's Hotel, REDRUTH, on Thursday, the 5th day of December next, at Three o'clock in the afternoon, for SELLING, in such lots as shall be then and there determined on, EIGHT (800lbs) PARTS, or SHARES, of the said Defendant, George Gilbert, of and in the said MINE, and the like PARTS, or SHARES, of the said Defendants respectively of and in the ORES, HALVANS, MACHINERY, and MATERIALS, and OTHER EFFECTS upon and belonging to the said mine.

For further information application may be made to the agents on the mine, or to Mr. Stokes, solicitor, Truro.

Dated Registrar's Office, Truro, Nov. 20, 1850.

SPARE STEAM-ENGINE AND MATERIALS FOR SALE.

**MR. GUMMOE** has received instructions to SELL, BY AUCTION, at ROCKS and TREVERBYN UNITED MINES, in the parish of ST. AUSTELL, CORNWALL, on Wednesday, the 27th day of November next, the following SPARE MACHINERY and MATERIALS:—

Comprising an excellent 70-horse STEAM-ENGINE, 10 and 7½ feet stroke, recently fitted with entirely new working gear, valves, condensing apparatus, &c., with 26 tons of new boilers.

36 fathoms of 16-inch PUMPS, with plunger bottom to fit.  
1 12-inch pole, H and double, 1 large oak capstan axle, with cast centre piece.  
Several 11 and 12-inch pumps, 1 12-inch pole and bottom.

An 18-foot WATER-WHEEL, and 8-head stamps, complete.  
1 horse-whim, sundry lots of chain, timber, and other articles.

For inspecting the above, and for further information, apply to Mr. Gray, engineer, Rocks and Treverbyn United Mines, St. Austell, Cornwall.

The Sale will commence at Twelve o'clock precisely.

Dated Imperial Fire and Life Insurance Offices, St. Austell, Oct. 30, 1850.

FAIRFIELD WORKS, BOW.

**MESSRS. FULLER & HORSEY** will SELL, BY AUCTION, on Thursday, the 13th of December, at the Auction Mart (unless an acceptable offer is previously made by private contract), by direction of the mortgagees, and with concurrence of the assignees of Messrs. Adams and Co., bankrupts, the extensive MANUFACTURING PREMISES, KNOWN AS THE

FAIRFIELD WORKS,

situate at BOW, MIDDLESEX, immediately adjoining the Junction of the Eastern Counties Railway with the Blackwall line, occupying nearly 5 acres, and arranged expressly for conducting, upon a large scale, the business of an Engineer and Railway Carriage Builder, which is now carried on upon the premises, fitted in the most complete manner with MACHINERY of the best description, by the first makers.

The BUILDINGS have been erected but a few years since in the most substantial manner, the two principal Factories measure each 293 feet in length, and are fitted with several lathes, drilling machines, shaping machines, planing machines, Nasmyth's steam-tit hammer, saw benches, furnaces, bending, drilling, and rolling machines, 2 highly-finished steam-engines, steam-boilers, boiler-makers' shop, store-rooms, coach trimmers' and builders' shops, omnibuses and private carriage factories, wheelwrights and fitters' shops, saw-mill, commodious counting-houses, draughtsmen's offices, a spacious yard, intersected with iron tramways, with a 14-foot turn-table, and by a siding having a communication on to the main line of the Eastern Counties Railway, by means of which, and the Birmingham and West India Dock Junction Railway, now nearly completed, facilities will be afforded for transit on all the northern and midland lines.

A large PLOT OF BUILDING GROUND, having a frontage of 363 feet, next the Old Ford-road, together forming an establishment which, for the business, is unrivalled in the vicinity of London—the resources being equal to the complete construction of about 20 railway carriages per week, in addition to the other branches of the business, of a general Coachbuilder and Engineer. The supply of water is plentiful, from a well 165 feet deep. The access is easy, and communication with the City every quarter of an hour, by means of the Blackwall Railway.

The premises are held on lease of 9½ years, from Christmas-day next, subject to a ground-rent of £60 per annum, with the option of purchasing the freehold at such a sum as would, if invested in Consolidated or Reduced Stock, produce the yearly dividend of £25.

The works may be viewed by tickets.

Printed particulars may be had of Messrs. Crowder and Maynard, solicitors, Coleman-street; of H. H. Cannon, Esq., official assignee, Birchall-lane; at the Mart; and with cards to view, of Messrs. Fuller and Horsey, Billiter-street, City.

THE FREEHOLD ESTATE OF THE HOLE, IN CUMBERLAND, FOR SALE.

**TO BE SOLD, BY AUCTION**, in the month of MARCH, 1851, the valuable FREEHOLD ESTATE OF THE HOLE, situated in PRIORS-DALE, in the parish of ALSTON, and county of CUMBERLAND, 6 miles from the town of Alston, on the turnpike-road from Alston to Middleton, which connects it with the Branch Railway from Hallwith to Alston, expected to be completed in 1851.

THE HOLE contains ONE HUNDRED AND THREE ACRES, or thereabouts, of anciently ENCLOSED LANDS, and TWO HUNDRED AND TWENTY-TWO ACRES, or thereabouts, of more recently ENCLOSED PASTURE, and an UNDIVIDED MOEITY of an adjoining MOOR, containing EIGHT HUNDRED AND THIRTY-EIGHT ACRES, or thereabouts.

The MINERALS, under the anciently enclosed lands, BELONG to the PROPRIETOR of the SOIL; and those under the above-mentioned pasture and moor, and also under an adjoining pasture, containing 204 acres, or thereabouts, the property of the Commissioners of Greenwich Hospital, BELONG to HIM JOINTLY with the COMMISSIONERS OF GREENWICH HOSPITAL.

The ESTATE abounds in LEAD, IRON, COAL, LIME, &c., the strata and mineral veins which intersect it being the same as those in which the rich mines of Alston Moor, Allendale, &c., have been worked with the greatest success in the immediate neighbourhood. A large quantity of lead has been, and still continues to be, obtained on the property—part of it producing from 60 to 90 ounces of silver to the fother of lead, but most of the veins are unexplored.

The PROPERTY is well FENCED, and has abundance of WATER and WATER-POWER. It has been extensively drained, limed, and planted, but is still capable of great improvement if those operations are continued, which can be done at a very trifling expense, as stones, lime, and coal, are all found conveniently situated on the property.

Being surrounded by the preserves of the Duke of Cleveland and the London Company, the Estate abounds with grouse and other game. The Tees, one of the finest fishing streams in the north of England, is within an hour's walk of the house, which is well adapted for a shooting-box, besides containing what is necessary for a large grazing farm, and is pleasantly situated on the banks of the River Tees.

There are also TWO COTTAGES on the PROPERTY.

THE HOLE IS TITHE FREE.

John Fenwick, the shepherd, will show the property; and plans and further particulars may be had at the Blue Bell Inn, Alston; the Queen's Head Inn, Newcastle-upon-Tyne; the Journal Office, Carlisle; and of Mr. James Barnett, Jun., Orvington, near Gateshead; Messrs. Chisholme and Co., 64, Lincoln's Inn-fields, London; and Messrs. J. and R. Gibson, solicitors, Hexham.—November, 1850.

**EXTENSIVE IRON-WORKS AND MINERAL LEASES**

FOR SALE, BY PRIVATE BARGAIN.—The BLAIR IRON-WORKS, belonging to the AYTHIRE IRON COMPANY, situated in the parish of DALRY and county of AYR, consisting of TWO BLOWING ENGINES, FIVE BLAST-FURNACES, FOUNDRY, PIT ENGINES, and other requisite utensils for the furnaces and working the minerals, all in working order, besides nearly TWO HUNDRED WORKMEN'S HOUSES.

The extensive MINERAL FIELDS consist of BLACKBAND, IRONSTONE, COAL, LIMESTONE, and FIRE-CLAY, held under long leases, at moderate fixed rents and royalties, all in the immediate neighbourhood of the furnaces; and the works having a connection with the Ayrshire Railway, command great facilities for transit and shipping of the produce. There is a large STOCK of IRONSTONE on the ground, which may be had at a valuation, and considerable progress has been made in the

ERECTION OF MALLEABLE IRON-WORKS,

in connection with the furnaces, which may also be had.—The above are well worthy the attention of capitalists and parties in search of mineral fields.

For further information apply to Mr. Brown, 35, St. Vincent-place, Glasgow.

**VALUABLE MINERAL PROPERTY TO BE IN PART**

OR WHOLLY DISPOSED OF.—This most desirable METALLIFEROUS SETTLEMENT, consisting of nearly 2000 acres, is situated in one of the renowned mining districts of central WALES. One discovery of SILVER-LEAD ORE, made upon it some few months ago, was considered of so singular and promising a nature, that a brief account of it was then published, and subsequently copied into most of the leading papers of the kingdom. Since that period a shallow sink has been made on the lode, which is 6 feet wide, traversing a beautiful soft whitish kila. The analysis of the ore, of which there is about 20 tons on the bank, gives 75 per cent. of lead and 80 ounces of silver to the ton; indeed, the last assay of the ore, found at about 7 fathoms from the surface, gave the extraordinary quantity of 200 ounces of silver to the ton. There is a fine mixture of lead ore at the bottom of the present shallow shaft. The mine is but 9 miles (of good turnpike-road) from the shipping port, and a fine stream of water runs close past it, offering every facility for the development of its invaluable mineral resources.

For further particulars apply (post-paid) to "X. Y. Z." at the office of the Mining Journal, 26, Fleet-street, London.

Just published, in 8vo., price 4s., bound in cloth,

By THOMAS BARTLETT, LONDON-STREET.

**A TREATISE ON BRITISH MINING, WITH A DIGEST**

OF THE COST-BOOK SYSTEM, STANNARIE AND GENERAL MINING LAWS. London: Edinburg Wilson, publisher, No. 11, Royal Exchange.

**MR. JAMES CROFTS** tenders his SERVICES to CAPITALISTS for the PURCHASE of BRITISH MINING SHARES, whether on a large or small scale; and will be happy to indicate such mines as present the greatest chance of permanent dividends, or ultimate success of the workings, either at the request of his correspondents, or in reply to specific inquiries. The utmost punctuality in attending to communications from the country may be relied upon; and by transacting business only FOR PRINCIPALS, Mr. Crofts hopes to establish an identity of interests between his friends and himself.

JUDICIOUS PURCHASES IN ESTABLISHED DIVIDEND MINES will INSURE a HIGH RATE OF INTEREST per annum, varying from 15 to 20 per cent.

MR. CROFTS HAS SPECIALLY FOR SALE—

|                               |  |
|-------------------------------|--|
| Bedford United                | Pennance Consols   |
| East and South Tamar          | Pennant and Craigwen (100 shares)                          |
| Wheal Crebor (25 shares)      | Wheal Providence (24 shares)                               |
| West Wheal Jewel (10 shares)  | Lamheroo Wheal Maria (20 shares)                           |
| Wheal Trescoll (20 shares)    | Bodmin Consols (10 shares)                                 |
| West Goginan                  | Bryntal (10 shares)  |
| East Sharp Tor                | Wheal Trevelyan (2 shares)                                 |
| Wheal Augusta (15 shares)     | East Polgoth (50 shares)—a very promising prospective mine |
| Warleggan Consols (50 shares) |  |
| Wheal Sheba (5 shares)        |  |

Dated No. 4, King-street, Cheapside, November 23, 1850.

**MR. EVAN HOPKINS, C.E., F.G.S., &c., CONSULTING MINING ENGINEER,**

OFFICE, No. 13, AUSTINFRAS, LONDON.

Mr. HOPKINS may be consulted daily by Noblemen, Gentlemen, and Capitalists, who have invested, or may wish to invest, their capital in MINES or MINERAL PROPERTIES, on all matters connected therewith (Home and Foreign).

\* Every description of Mineral Property inspected and reported on—on the Continent as well as the United Kingdom, and distant capitalists may receive periodical advice.

N.B.—Being a responsible and confidential business, and having a very extensive connection, it becomes necessary to acquaint those who apply for reports, that they must be paid for on delivery, at his office, otherwise they cannot be attended to.

**VALUABLE COLLIERY, AT LOWSIDE, NEAR OLDHAM.**

—TO BE LET, BY TICKET, at the Angel Inn, Oldham, on Wednesday, the 4th day of December, 1850, at Five o'clock in the afternoon, on a RENTAL, calculated per statute acre per foot in thickness, those very valuable MINES OF COAL, called the PEACOCK NEW EARTH OR BENT MINES,

under the Lowside Estate. These mines extend under about 40 statute acres; they are each about 30 inches in thickness, of first-rate quality, and in the best markets.

The water has recently been drained from the mines by workings on the deep in an adjoining estate, showing the mines to be free from faults, and in a condition to be worked immediately, with a small outlay, thereby possessing advantages seldom equalled.

Mrs. Brice, of Lowside, will appoint a person to show the estate, and from her may be had a plan and particulars, with conditions of letting and terms of lease.

Particulars may also be had from Mr. George Wrigley, Corporation-street, and Mr. W. Sidebottom, Cleveland-buildings, Manchester; the trustees; and from Mr. Thos. Livezey, mining engineer, Chamber Hall, Oldham; or Messrs. Slater and Heelis, solicitors, Manchester.

**MINING COMPANY OF WALES.—PROSPECTUSES,**

containing REPORTS on the MINES and QUARRIES of the COMPANY, Terms and Conditions for its Government, &c., may be had of ST. PIERRE FOLEY, Secretary, to whom letters on the allotment of shares, and on the general business of the Company, are to be addressed.—Offices, 24, Lincoln's Inn-fields, London.

**PENTIRE GLAZE AND PENTIRE UNITED MINES,**

CORNWALL.—All PARTICULARS relative to the recent IMPORTANT DISCOVERIES at these MINES may be known at the OFFICES of the COMPANY, No. 23, Tokenhouse-yard, London.

**TAMAR SILVER-LEAD MINING COMPANY.—This is**

to give Notice, that if the CALL of ONE POUND per share, made the 26th of September, and due the 4th of November last, BE NOT PAID on or before the 4th of December, such SHARES on which the Call remains unpaid will be FORFEITED. Salvador-house, London, Nov. 21, 1850.

**COMBLAWN SILVER-LEAD MINE, near CALLINGTON,**

CORNWALL.—Notice is hereby given, that, at a Special General Meeting of the adventurers, held in London, on the 12th inst., it was resolved,—

That, in consequence of a larger capital being required for the further prosecution of the mine, it be OFFERED FOR SALE, AS A MINE, together with the powerful STEAM-ENGINE, of 60-horse cylinder, lately erected, all suitable BUILDINGS, and MACHINERY of the most substantial and modern character, including flat-roads, pumps for two shafts, and all other MATERIALS on the MINE, amply sufficient to work it to a considerable extent.

TENDERS for the PURCHASE, BY PRIVATE CONTRACT, to be forwarded to the offices of Messrs. Smith, solicitors, Devonport; or to the secretary in London, until the 9th December next. In the meantime the engine will be kept at work, to facilitate inspection; and Captain Penultima is instructed to give all requisite information on the spot.

JAMES CROFTS, Secretary.

Dated No. 4, King-street, Cheapside, London, Nov. 16, 1850.

**EAST CRAIGWEN SILVER-LEAD MINING COMPANY,**

DINAS MWDWY, COUNTY MERIONETH.

3000 parts, or shares, of £2 each.

CONDUCTED ON THE "COST-BOOK" SYSTEM.

This sett embraces the whole of the intermediate space between the well-known mines of Cowarth and Craigwen, which are in full work under separate companies, and returning rich silver-lead ores to market. The advantageous position of East Craigwen is, therefore, self-evident; and the great activity of the mountain, being at an angle of about 45, or 1 in 2, renders it peculiar, if not without parallel, in mining, by giving backs of extraordinary height.

Reports, specimens, and prospectuses, may be had at the offices of the company, 57, Threadneedle-street; or at Messrs. Wiro and Childs, St. Swithin's-lane, the solicitors of the Company.

Applications for shares will be received until Monday, the 9th of December.

**UNITED MINES, TAVISTOCK.—CONDUCTED ON THE**

"COST-BOOK" SYSTEM of Economy and Limitation of Responsibility.

OFFICES—28, THREADNEEDLE-STREET, and 25, PARLIAMENT-STREET.

Capital £10,240, in 1024 shares, of £10 each.

TRUSTEES.

JOHN BAYLY, Esq., Plymouth.

JOSEPH ELLIOT SQUARE, Esq., Plymouth.

DIRECTORS.

GEORGE FRIDHAM, Esq., solicitor, Plymouth.

WILLIAM LONGMAID, Esq., 31, Beaumont-square.

H. SMITH, Esq., C.E., 115, Gloucester-terrace, Hyde-park.

SECRETARY—Mr. W. L. Turner, 28, Threadneedle-street.

FOUNDER (TREASURER)—J. E. Square, Esq., Plymouth.

AUDITOR—R. B. Watson, Esq., consulting sharebroker, 93, Old Broad-street.

SOLICITORS—Messrs. Terrell and Matthews, 30, Basinghall-street.

The prospectus of these mines, the maps, and the certificates of John Hitchens, of Tavistock; Robert Dunstan, of the West Caradon Mines; Samuel Seacombe, of the Phoenix and the Caradon Mines; Richard Edwards, of the Wheal Franco and Plymouth Wheal Yeoland Mines; John Lean, of the Wheal Franco; and Joseph Eddy, of the Wheal Yeoland, may be seen at the office, or at the solicitors.

The major part of the shares being already taken in the locality of the mines, the remaining portion may be applied for (by letter) to any of the directors or officers of the Company; or at the offices of Messrs. Terrell and Matthews, Basinghall-street; or to Messrs. Woolcombe and Co., solicitors, Plymouth.

**THE MINING ALMANACK, FOR 1851: under the immediate**

Sanction and Patronage of His Royal Highness PRINCE ALBERT, Lord Warden of the Stannaries, Chief Steward of the Duchy of Cornwall and Devon, &c.

The success which has attended the publication of the MINING ALMANACK, being the only Annual devoted to the Mining Interest, induces the Editor to announce its publication early in the ensuing year, at a reduced price, although conveying all the Statistical and Tabular Matter interesting to the adventurer and useful to the practical miner. In arriving at this determination, the Editor is in a great measure influenced by the prospect of a National Exhibition of 1851, so as to afford to those who may visit the capital from our mineral districts and foreign climes a facility of acquaintance with all matters appertaining to the mineral kingdom. To effect this, it will be the object of the Editor to give the results of the mineral kingdom for the present year; and with that view invites the assistance of, and communications from, parties interested, addressed to the Editor, 25, Fleet-street, London.

Early communications, with diagrams, are requested, and advertisements should be forwarded early in January, 1851.

**EXHIBITION OF 1851.—T. P. AUSTIN, proprietor of**

PEELE'S COFFEE-HOUSE, FLEET-STREET, begs respectfully to inform his friends and the public generally, especially those interested in the forthcoming GREAT EXHIBITION, that he has recently NEARLY DOUBLED THE SIZE OF HIS ESTABLISHMENT, which will enable him to afford increased comfort and convenience to those honouring him with their patronage. THE FILES OF NEWSPAPERS and PERIODICALS, for which Peele's Coffee-house is so celebrated, containing all the reports of the Royal Commissioners, will be available to those visiting this establishment.

\* The Mining Journal, in addition to all Publications connected with the Mining Interest, are regularly filed.—Bed and Breakfast, 5s., or £1 per week.

**WANTED.—A PERSON** who thoroughly understands the PREPARING and BLEACHING of SULPHATE of BARYTA for a PIGMENT. He must be a practical man, able to give instruction as to what MACHINERY may be requisite, and SUPERINTEND the ERECTION and WORKING thereof.—Apply (pre-paid), stating salary expected, to "C. W.," 6, Austinfrass, London.

**A SITUATION WANTED, as MANAGER of a COLLIERY:** has a practical knowledge of both top and bottom; can keep books, and take the management of all belonging to a colliery. Unexceptionable character can be given.—Letters to be addressed to "T. A.," Post-office, Chorley.

**TO TIN-PLATE MANUFACTURERS.—WANTED, a** PRACTICAL TIN-PLATE MAKER, one thoroughly acquainted with the manufacture in all its branches, and qualified to SUPERINTEND the ERECTION of WORKS calculated to turn out 600 boxes per week.—Address "E. S. E.," at Mr. Hall's, stationer, No. 78, Old Broad-street, London.

**TIN SMELTER.—WANTED, a SUPERINTENDENT** for a TIN SMELTING HOUSE. None need apply who are not practically acquainted with all the details of Tin Smelting.—Applications by letter only, to "C. B.," care of Messrs. Pearson and Son, stationer, 36, Bishopsgate-street-within.

**TO BE SOLD, BY PRIVATE CONTRACT, an horizontal** STEAM-ENGINE, 12½-inch cylinder, with 3-foot stroke, and 18-horse power cylinder boiler, shafts, West's verticals, all complete, with a flat-rop, about 90 yards long, all quite new, and in every way suitable for colliery use.—Address "T. A.," at the Post-office, Chorley.

**FOR SALE, BY PRIVATE CONTRACT, a 50-in. ENGINE,** WITH BRASS CONDENSING WORK and BOILER (10 tons). Apply to Capt. Evans, Pool, Cornwall.

**TO FOREIGN CAPITALISTS OR OTHERS.—TO BE** DISPOSED OF, a very VALUABLE PATENT FOR FRANCE, and also ONE FOR BELGIUM, both taken out in the year 1848, for an invention for which Letters Patent had previously been granted for Great Britain and Scotland, and which is now in successful operation in many of the large mining districts. The price at which the above would be sold will yield a very large return upon the purchase-money.

Full particulars may be obtained by addressing a letter (pre-paid) to "L. M.," at the office of the Mining Journal, 26, Fleet-street, London.

**FRANCE AND BELGIUM—VALUABLE PATENT** RIGHTS.—FOR SALE, a PATENT, secured in FRANCE and BELGIUM, for an INVENTION connected with RAILWAYS and the MANUFACTURE OF IRON, now in successful operation in this country, and which has been most favourably reported on by the highest authorities.—Address "B.," at the office of the Mining Journal, 26, Fleet-street, London.

**VALUABLE PATENT.—The PATENTEE of an INVEN-** TION for PROTECTING DWELLING-HOUSES and other kinds of PROPERTY against BURGLARY and FIRE, is desirous of TREATING with a GENTLEMAN for the SALE, or PRACTICAL WORKING, of the SAME.—The demand for the apparatus being such as to require an immediate organisation of workmen, and a distinct business establishment.—Apply personally, or free by post, to Messrs. Tatham, Upton, Johnson, and Co., solicitors, 24, Lincoln's Inn-fields.

**CARDIGANSHIRE SILVER-LEAD MINES.—Gentlemen** desirous of INVESTING in these very profitable UNDERTAKINGS, may receive correct INFORMATION by applying to Mr. EDWARD BAGOT, Mineral Surveyor and Civil Engineer, LLANELLY, through whom advantageous purchases can now be made. Mining Office, Llanelly, Nov. 7, 1850.

**SHARES are TO BE SOLD in the following MINES:—**

Levant, St. Just. | Wh. Castle and Boswedden, St. Just.

Trevelyan Consols, near St. Ives. | West Wheal Treasury, Gwinnar.

Apply at the offices of Mr. Batten, No. 1, Crown-court, Old Broad-street.

**FRANCIS PRYOR, MINE AGENT and SHAREBROKER,** begs to inform his friends and the public, that he has REMOVED his place of business from "Bell Cottage," Gwennap, to his offices, TOWN HALL, REDRUTH.

Mining Offices, Town Hall, Redruth, Nov. 19, 1850.

**MINING PROPERTY.—Mr. J. TREVENA TEAGUE** begs to call the attention of CAPITALISTS to the present FLOURISHING STATE of the CORNISH MINES, and more especially to those in the neighbourhood of REDRUTH, some of which are paying the shareholders from 5 to 75 per cent. per annum—offering to the public the safest and most remunerative investment of any of a speculative character.—Mr. J. T. TEAGUE is in a position to do BUSINESS in any of the IMMEDIATE MINES, and will take pleasure in furnishing parties with a List of his Prices on application.

MINES INSPECTED BY EXPERIENCED AGENTS.

Fore-street, Redruth, Nov. 19, 1850.

**MINING PROPERTY.—BUSINESS** transacted in every description of MINING PROPERTY, SHARES BOUGHT and SOLD, ADVICE GIVEN TO PARTIES as to INVESTMENT, ADVANCES OF MONEY MADE on this DESCRIPTION OF PROPERTY, Statistics given on Mines, and the earliest information obtained from the mineral districts.—Apply to DURRANT & CO., Mining Sharebrokers, 58, Lombard-street.

**MINING OFFICES.—48, THREADNEEDLE-STREET,** LONDON.—Messrs. FULLER & CO., beg respectfully to inform the public that they are in a position to BUY and SELL SHARES in all the DIVIDEND-PAYING MINES, and have on hand Devon Great Consols, North Pool, Russell, North Levant, South Carn Brea, Warleggan Consols, Wheal Elizabeth, Harris, &c.

WANTED.—East Russells.—Nov. 1, 1850.

**MINING OFFICES, ST. MICHAEL'S CHAMBERS,** ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

MR. R. TRIPP, MINING AGENT, has FOR SALE SHARES in most of the best DIVIDEND-PAYING MINES and others, which will pay the purchaser, at present prices, from 15 to 30 per cent. including North Pool, South Caradon, West Caradon, South Tolgus, Alfred Consols, Botallack, Trevelyan Consols, North Pool, Russell, North Levant, Trelawny, Spearhead Consols, Stray Park, Wheal Mary Ann, Tremayne, Bedford United, Wellington, Tamar, South Tamar, Hennock Lead, Trescoll, East Wheal Reeth, &c.; and is a BUYER of Devon Great Consols, Wheal Reeth, North Buller, Carthew Consols, Wheal Penhale, &c.

**MINES.—MOLYNEUX & CO., 6, FINSBURY-PLACE** SOUTH, and 6, WEST-STREET, FINSBURY-CIRCUS, have SHARES FOR SALE in DIVIDEND-PAYING and OTHER MINES, which will ensure to capitalists the safest and most unexceptionable investment.—Office hours from Ten to Five o'clock.

**MANUEL and CO., MINING AGENTS,** are instructed to SELL in the following DIVIDEND-PAYING MINES:—Great Wheal Badern, Runnaford Coombe, Great Wheal Michell, West Wheal Rose, Wheal Emily, Pentire Glaze, and others.—Office, 42, Fish-street-hill, London.

**MR. JOSEPH J. BAKER, METAL BROKER AND** GENERAL COMMISSION AGENT, WOLVERHAMPTON.

OFFICES—MARKET-PLACE.

**MR. JOHN DAVIES, MINING SHAREBROKER,** No. 38, TOWER-BUILDINGS, TOWER-GARDEN, LIVERPOOL.

**MESSRS. BOXALL & CO., MINING SHARE DEALERS,** 5, CROSBY HALL CHAMBERS, BISHOPSGATE-STREET.

**GOVERNOR AND COMPANY OF COPPER MINERS** IN ENGLAND.—Notice is hereby given, that a SPECIAL GENERAL COURT will be HELD at 5, Warrford-court, Throgmorton-street, on Tuesday, the 3d December next, at One o'clock precisely, for the purpose of receiving a Report explanatory of the present position of the Company's affairs; a communication from the Shareholders' Committee, and for considering such measures as may appear thereon to be expedient.

By order of the Court of Assistants.

WM. TATE, Accountant.

**HOLYFORD COPPER MINING ASSOCIATION.—**Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the shareholders of the HOLYFORD COPPER MINING ASSOCIATION will be HELD at the office, 34, Great Winchester-street, on Thursday, the 5th December next, at Twelve o'clock, for the purpose of electing a Director, in the place of Mr. Edward Hunt, resigned, and that Mr. Edward Henley has been proposed as a candidate for the vacancy occasioned by such resignation.

J. W. BUCKLAND, Jun., Secretary.

London, Nov. 22, 1850.

**WHEAL MAY MINING COMPANY.—Notice is hereby** given, that the next BI-MONTHLY MEETING of the adventurers in WHEAL MAY MINING COMPANY will be HELD at the Hall of Commerce, Threadneedle-street, London, on Friday, the 29th day of November inst., at Twelve o'clock at noon precisely, for the purpose of examining the Accounts of the past two months, receiving the Report of the Committee; and, if deemed expedient, to adopt any suggestions therein contained, and any other business that may be brought before the meeting relating to the affairs of the mine.—15, Old Broad-street, Nov. 21,



## Transactions of Scientific Bodies.

## MEETINGS DURING THE ENSUING WEEK.

|           |   |            |
|-----------|---|------------|
| MONDAY    | Geographical—3, Waterloo-place                    | 8 1/2 P.M. |
| TUESDAY   | Medical and Chirurgical—53, Berners-street        | 8 P.M.     |
|           | Civil Engineers—23, Great George-street           | 8 P.M.     |
|           | Zoological—11, Hanover-square                     | 9 P.M.     |
| WEDNESDAY | Society of Arts—Adolph                            | 8 P.M.     |
| THURSDAY  | Royal—Somerset-house                              | 8 1/2 P.M. |
|           | Royal Society of Literature—4, St. Martin's-place | 4 P.M.     |
| FRIDAY    | Botanical—20, Bedford-street, Covent-garden       | 8 P.M.     |

## PROFESSOR TENNANT'S LECTURES ON MINERALOGY—MICA, SERPENTINE, AND FELSPAR—No. VII.

On Wednesday, Prof. TENNANT commenced his lecture on mineralogy, at King's College, by a description of mica, which he said comprised a rather large group of minerals, most of which were of an aluminous-earth character. Young mineralogists not unfrequently mistook mica for various metallic minerals, such as silver, gold, and copper, according as it occurred of a white, yellow, or red colour. Common mica had a somewhat pearly lustre, and was exceedingly various in its colours, being white, grey, light green, pale violet, rose red, peach blossom, grass green, and brown. It occasionally had a white or grey streak. Its most remarkable peculiarity was that it separated in lamina, which were highly elastic and flexible, a quality which served to distinguish it from many substances which had similarity of appearance. It occurred in oblique rhombic prisms, easily divisible parallel to their terminal planes. The dark-coloured varieties often contained as much iron as would act on the magnet. Mica might be observed in very minute layers in the Yorkshire flagstones, used as foot pavements in the streets. Its specific gravity was 2.8, and its hardness 2 to 2.5. It exhibited two axes of double refraction, while magnesian mica had only one axis of double refraction, when viewed through the medium of polarised light. Magnesian mica occurred in regular six-sided prisms, which had a very ready cleavage perpendicularly to their axes. Its colour was generally brown or dark green, and it was more opaque than the common mica. Talc very much resembled mica, but was easily distinguished by its want of elasticity. Mica was a transparent substance, and was used in some of the patent stoves, and for lanterns and lights. In the first instance, it was preserved from the action of the fire by being exposed at the bottom to a current of air; but if that current were impeded, the mica speedily charred, and soon scaled off, until none was left. It was used in the Russian fleet instead of glass, as being less likely to be broken by the concussion of heavy artillery. Some of the beautiful specimens sold at various places were obtained by the mica being heated in a mass, and then immersed in a pail of water. It then became easily divisible, and wore the appearance of native copper. Many sandstones were the debris of ancient granite rocks with the quartz and mica only remaining, the felspar being decomposed and wanting.

Chlorite, which was also called peach in Cornwall, was presented in six-sided tabular crystals. It did not possess the flexibility of mica, and was often found coating the chaledony, agate, and opal, found in the amygdaloid rocks. The substance commonly known as green earth was a form of chlorite. Talc, on the contrary, was found in foliated masses; it was quite soft, and was used extensively in the manufacture of paint. The cosmetic employed by ladies to paint their cheeks was made of talc.

Compact talc, or French chalk, was the substance used by tailors, as it marked cloth without doing it any injury. It was also much used in reducing friction in machinery. It was obtained chiefly from America, but was found very plentifully in South Australia, where it formed mountain masses. With steatite might be classed potstone and serpentine.

Potstone was so called because, in Saxony and Bavaria, it was used as commonly as earthenware in this country, and for similar purposes. The lecturer exhibited a very handsome Bavarian jug, made of this substance.

Serpentine abounded in several districts in the United Kingdom, as the Lizard, and the Isle of Anglesea. A very handsome kind, called the Galway marble, had rapidly, of late, increased in reputation. The library at the New Club-house, in St. James's-street, was lined with this substance, and presented a most beautiful appearance. It was not a crystalline substance; or, rather, its crystals were pseudo-morphous. It was usually of a pale green colour, with streaks of a darker hue, and its fracture was conchoidal. It was unctuous to the touch, and when first taken from the rock yielded easily to the knife. When exposed to the atmosphere, it became hard; this was attributable to the quantity of water contained in it, some specimens yielding as much as 15 per cent. The Florentine variety would cut like a piece of cheese, and was manufactured into figures which very nearly resembled bronze. The lecturer exhibited several pretty specimens from the neighbourhood of Glen Tilt, which abounds with the varieties of altered rocks. Some beautiful specimens were shown at the last exhibition of the Society of Arts, and when the new museum in Jermyn-street was opened, there would be found there some splendid tablets of serpentine, from Cornwall. Many persons objected to serpentine as a material for the sculptor, because they fancied that certain vein-like appearances were flaws; that was not the case, as they were most frequently small veins of asbestos. Latterly, large masses of copper ore had been found in the serpentine rocks of Cornwall, but they occurred so capriciously, that the expense of mining for it was greater than the profit. It was in that very different from the copper of Lake Superior, which was often found native in lumps of 20 or 30 tons weight. At the Polytechnic Institution there was a lump weighing 1 ton 14 cwt., which was evidently but a fragment of a mass originally many times larger. He might mention that the working of the green marbles of Galway would furnish an admirable field for the employment of the population of Ireland, but the want of enterprise and capital had hitherto prevented the development of this branch of industry.

Nephrite was exceedingly interesting, as the material with which the South Sea Islanders manufactured their war hatchets and other implements. It was as hard as iron; and the stone hatchets made by these savages would chop wood as feathery as if they were true "Brummagem." In the British Museum there was a sculptured tortoise of this material, which was found on the banks of the Jumna, near the city of Allahabad, in Hindostan. Nephrite was very much used in China for ornamental purposes. The chemical composition of this mineral was almost identical with serpentine, except that it had much less water.

Felspar was so named from a German word, signifying field, as it was there found in very considerable quantities. It had been ascertained, however, that it was not a native product of that country; but that it had been brought down in masses by means of enormous icebergs. A very handsome bridge at Berlin was built of polished granite, chiefly composed of felspar; and, in order to show the vast size of the blocks thus scattered over the country, there was a vase in that city, in front of the Royal Museum, made from a single block, which was 22 ft. in diameter. Felspar was an ingredient in the composition of granite—the other elements being mica and quartz. It decomposed more readily than those substances. The white crystals in porphyry were felspar. The appearance of felspar was exceedingly various, and it was accordingly known under many appellations. Common felspar was partially translucent. Of its varieties, moonstone was one of the most remarkable. When cut and polished, it had a chatoyant reflection of light. Sunstone was the same substance, but somewhat different in colour. There were valuable specimens of sunstone in the British Museum—some of which cost as much as 5*l.* a piece. Common felspar had two distinct lamellar cleavages. Potash was a tolerably large ingredient in felspar; and it was that which rendered this material so subject to decomposition. A great number of the Egyptian antiquities of the British Museum were of this substance. Nearly all those which were called granite in the catalogues were a true syenite, and composed of felspar, quartz, and hornblende. The obelisk of Luxor, in Paris, was syenite. The lecturer concluded by exhibiting some exceedingly handsome polished granites, which had been sent to him by a gentleman at Fowey in Cornwall, who, having spent a large sum of money in casing the entrance hall of his mansion with all the varieties of stone produced upon his estate, had used the debris for repairing the roads—a fate which these splendid specimens would have shared, had not the professor expressed a desire to preserve them.

[The next lecture will treat of granite and its varieties, porphyry, and the porcelain clays.]

The subject of Prof. Ansted's second and concluding lecture was the metallic minerals. The wide field which it embraced necessarily obliged him to be very superficial in his notices of the different products brought under consideration; but occasionally some interesting and important facts presented themselves. The metals were divided into three groups—first, those which were commonly used as metals; secondly, those which were known and used, but not generally in the metallic state; thirdly, those with the properties of which we were not

acquainted. The uses of the metals were further set forth in a very perspicuous manner, by means of a tabular statement on the plan of sectional lines, leading downwards from the names of the metals, and horizontally from a list of the various arts and manufactures, the employment or non-employment of a certain material in any particular branch being indicated by a cross, or blank, at the point of intersection. In connection with the article of iron, the subject of meteoric stones was introduced, as presenting the only instance in which that metal was found in its native state. The lecturer alluded to the prevailing theory as to the origin of these bodies, but did not express any decided opinion upon the subject. One was mentioned as having fallen in America of the enormous weight of 30,000 lbs. Pure iron was among the rarest things to be met with in the arts. Only by very careful management, on an exceedingly small scale, in the laboratory, could it be obtained. Carbon, sulphur, phosphorus, or titanium, were almost always present, though it might be in a very minute proportion. Iron was a very ductile metal; a wire not more than the twelfth of an inch in thickness would support a weight of 550 lbs. Pure iron was scarcely fusible with any amount of heat that could be produced. It was almost the only metal capable of being welded. The best ore was that which was found in combination with oxygen. That which was mixed with sulphur was of no use for the manufacture of iron, though it was for sulphur. The most abundant, though not the most valuable kind of ore was that which contained carbon. Iron was not commonly used as an alloy. Combined with arsenic, it made a white kind of metal; but there was danger in thus employing it, as, under the action of heat, the arsenic was given off in the form of vapour, which was highly poisonous.

Copper, unlike iron, was often found in a native state. A mass of 80 tons weight had been found at Lake Superior, pierced through and through with threads of silver in a most singular manner. There was this remarkable peculiarity about copper, that it transmitted, when made sufficiently thin for the purpose, a green light, though the light reflected from its surface, as everybody was aware, was red. It burnt, also, with a green flame. An intense heat, about 2000 deg. Fah., was required to melt it. Copper was an extremely sonorous metal, the most sonorous, indeed, of all the metals; and for this reason it was employed, in combination with others, in the manufacture of bells and gongs. Some of the finest greens used by the painter were arseniates of copper. The familiar material known as German silver was a mixture of copper and nickel. The quantity annually obtained was about 26,000 tons, fully one-half of which was the produce of Great Britain.

Silver came next under notice. It was found native, like copper. Next to gold, it was the most malleable of metals. Leaves could be formed of it so thin that ten thousand of them might be comprised within the depth of an inch. It was remarkable for its tenacity also. The lecturer explained, in connection with this part of his subject, the different processes of silver-plating, giving the preference to the old method over the electrolytic, which, he said, though cheaper, gave a less compact and more brittle material.

Passing next to the subject of lead, he described its various properties, and remarked that it was soluble in perfectly pure water. Water which was not quite pure left a deposit which prevented the injurious qualities of the metal coming into play. There was more danger from rain water than from spring water; but when rain water was exposed to the air, in open reservoirs or canals, the effects arising from the use of leaden pipes ceased to be of importance. Britannia metal, it was observed, was a mixture of lead with antimony, bismuth, copper, and tin. Three parts of tin, eight of bismuth, and five of lead formed a compound which was more fusible than either of the three metals by itself, burning brilliantly in the flame of a candle.

Zinc was a metal which burnt freely at a low temperature; for which reason it could not safely be applied to many purposes for which it was well adapted. On exposure to damp it took a very slight oxidation on the surface, which would remain a long time without proceeding further. Calamine was the name of the substance from which it was obtained.

Gold did not occupy so large a portion of the lecturer's attention as might have been expected. As, in illustration of its malleability, he mentioned that 280,000 leaves would not form a thickness of more than an inch; and in the form of wire it might be drawn out so fine that 550 feet would weigh but a single grain. The quantities obtained in 1848, as compared with 1800, were stated as follows, we presume in pounds sterling:—

|               | 1800.     | 1848.     |
|---------------|-----------|-----------|
| Europe        | 185,000   | 200,000   |
| Siberia       | 185,000   | 4,000,000 |
| Africa        | 78,770    | 400,000   |
| North America | —         | 200,000   |
| South America | 2,467,300 | 1,200,000 |
| Total         | 3,725,080 | 6,000,000 |

A brief review of the other metals, consisting almost entirely of a simple enumeration of the manufacturing processes in which they are employed, closed the lecture.

## INSTITUTION OF CIVIL ENGINEERS.

NOVEMBER 19.—WILLIAM CURRIE, Esq. (President), in the chair.

The subject of the paper read was "The Ventilation of Collieries, Theoretically and Practically Considered," by Mr. William Price Stravé (of Swansea), M.I.C.E., which will be found in another column.

The discussion upon the paper was announced to take place at the next meeting, until which time the meeting was adjourned.

GUISE'S IMPROVEMENTS IN GAS BURNERS.—The object of the present improvement is to produce a very pure light, by ensuring the perfect combustion of the gas without the projection of any shadow. The burner itself is light and elegant, and the oxygen of the atmosphere is beaten against the flame by a double deflection. It is first deflected inwards, by means of a glass cone, and then, at a little distance higher up, it is gently bent in an outward direction, by means of a metallic button. The effect is such as to give the flame a form approaching to that of a budding tulip. In the ordinary gas deflector the chimney itself is contracted about an inch from the base, and it frequently occurs that in case of accident considerable difficulty is experienced in replacing it, particularly in the country. In the new burner a common straight chimney is employed, and the deflecting glass cone is altogether separate and independent. If the former, therefore, chance to be broken, it is replaced with facility, even in a country town, where any apparatus at all out of the common way is a rarity. Apropos of the difficulty of meeting with certain necessary trifles of this kind at a distance from London, we actually recollect being unable, a short time since, to obtain a circular lamp cotton, of ordinary size, in the whole town of Dartford. We have witnessed several experiments with the new burner, and it appears to us to be pre-eminent over all others in the great purity of the light which it emits. The predominating red ray which characterises, in a greater or less degree, the flame produced from the majority of gas burners, appears in this instance to be nearly lost in the most dazzling whiteness. Those who feel interested in the subject have now an opportunity of witnessing the comparative effect of this and other burners, at the manufactory, 45, Clerkenwell-green.

CASE OF MR. WILLIAM HIRST.—An appeal, which has been circulated on behalf of this unfortunate gentleman, has been strongly recommended to us for notice. Mr. Hirst, who is now a prisoner for debt in York Castle, was once a large manufacturer of woollen cloth, to the fabrication of which he formerly devoted himself with acknowledged success. The inventive talent and ingenuity displayed by Mr. Hirst in this branch of manufacture, coupled with his present unfortunate position, have excited the sympathy of many who have known him, and a subscription has been commenced, with a view to his liberation. The sum for which he is imprisoned amounts to 144*l.* for costs, while he claims of the plaintiff 400*l.*, which is credible enough under the curious operation of the law of imprisonment for debt. The merits of Mr. Hirst, as a woollen cloth manufacturer, were recognised so far back as 1818, when he was appointed manufacturer of superfine cloth to his Royal Highness the Prince Regent, on account of the perfection to which he had brought that fabric. Mr. Hirst appears to possess some further important improvements, and he is naturally anxious to compete in this species of manufacture at the forthcoming Exhibition, at which the skill he is reputed to possess would be fully appreciated; and if the facts stated in the circular are substantiated, it is to be hoped that he will not be suffered to languish in a debtor's prison, instead of exerting the energies which there is reason to believe might prove beneficial to the public.

Among the literary first fruits of the Great Exhibition, we may mention the *Expositor*—a journal started, and specially devoted to the illustration of all matters connected therewith, by means both of description and woodcuts. But though the forthcoming Exhibition, judging from the numbers which have appeared, is likely to receive ample justice from the *Expositor*, it is not confined to that attractive topic, since a great variety of scientific inventions, patents, &c., together with views of newly-constructed docks and harbours, will be found among its illustrations. These last are executed in a very superior manner, and over and above the merely descriptive matter, a great deal of interesting information of a miscellaneous kind, but chiefly in reference to the Exhibition, and the progress of manufacturing and scientific industry, is given in its columns. The only exception we can take in regard to its literary contents is to a suggestion put forth in a leader in the last number, in which it is proposed that the crowds of visitors, native and foreign, to the Exhibition next spring should, in the event of a pressure of house room, seek lodgings by railway at Gravesend, Rochester, Dover, Tunbridge, and a dozen of other places, even as far as Portsmouth, Bath, and Bristol, and come up daily to view the wonders in Hyde-park—which really strikes us as a rather green idea. Beyond this sage proposition we see nothing to cavil at, but much to praise and approve.

INDIGESTION AND COMPLAINTS OF THE STOMACH CURED BY HOLLOWAY'S PILLS.—The symptoms arising from dyspepsia and disordered stomachs, are nausea, flatulent and acid eructations, languor, want of appetite, distension of the stomach, diminished countenance, and sense of oppression, and sinking after meals, dejected spirits, and the want of a proper circulation of the blood; also frequent pains in the head and breast, to remove these unpleasant sensations it is only necessary to take a few doses of Holloway's Pills; this inestimable medicine will speedily relieve the most urgent symptoms, restore the tone of the stomach, and prevent a recurrence of the disease.—Sold by all druggists, and at Professor Holloway's Establishment, 244, Strand, London.

## KINGSETT AND BEDFORD MINE.

In our last Number, we noticed the receipt of a letter from Mr. Jury, of Exeter, relative to a meeting of adventurers in this mine on the 11th inst.; but, on account of the late period at which it was received, we were compelled to defer any remarks on it. We have since received full details of the meeting, together with the resolutions that were passed. It would almost appear that the object of the meeting, judging from the tenor of the resolutions, was to "revolutionise" the management of the mine altogether, since the dismissal of former employees, and the contemplated appointment of a fresh inspector and overseer figure very prominently therein. It further appears that the intention of a portion of those present was to expel Mr. H. Vatcher from the office of pursuer; to effect which, a resolution, moved by Mr. Siringier, and seconded by Mr. Dunning, was submitted, calling on him to resign. This was followed by a show of hands, which was in favour of Mr. Vatcher retaining office, and afterwards by a poll of those present, when the result was again in that gentleman's favour. There was, however, a further mode of testing the feelings of the adventurers, which was by adding the proxies against him to the votes given in person (neither Mr. Vatcher, or his friends, tendered any proxies), when the numbers showed for Mr. Vatcher's resignation, 348; for his retention of office, 216: leaving a majority of 132 against him. It was objected on behalf of Mr. Vatcher that the proxies against him were presented on unstamped paper—a point on which we shall have something to observe before concluding our remarks; and it was ultimately agreed that counsel's opinion should be taken on this knotty point, for which purpose the meeting was adjourned for a fortnight.

Such appear to be the brief facts of the meeting, and they are of a nature always to be regretted when they occur in connection with any mining company. That they indicate a considerable degree of dissatisfaction with the management of the mine is not to be denied; but that they establish a case against the party towards whom such hostility is directed certainly cannot be affirmed. Neither is the decision in the plain matter of votes by any means satisfactory; first on account of the technical objection referred to, and next because the entire number of votes in hostile array, on this occasion, amounted only to 348 out of 1024—the number of shares into which the mines is divided. Had the whole number been represented, the result might have been very different. It is further to be observed, that Mr. Vatcher is himself a holder of 160 shares, and has, therefore, a stronger individual interest than any other shareholder in the good and economical management of the mine; and that some of the most influential parties connected with the mine—viz., the committee of management—do not concur in the censure cast upon him by the meeting, is proved by the resolution adopted by them a day or two afterwards—viz.: "That the committee of management cannot but express their regret that any personal feelings should have been introduced at the general meeting of shareholders on the 11th inst.; nor can they separate without declaring that such personalities and unfounded charges are highly injurious to the interest of the company."

In this resolution there is not much doubt that the managing committee have hit upon the true cause of the outbreak, which has all the aspect of having originated in personal jealousies—not at all credible, whether indulged in by one party or the other. To give another complexion to the case, it would be necessary to adduce something tangible to show that Mr. Vatcher is conspiring against the interests of the shareholders, with whom, *prima facie*, he has the strongest reason for acting in concert. His opponents appear to have acted too much on the principle of the worthy Scotch ballad, who when pressed by adverse arguments, used to cry out—"Put it to the vote, provost, put it to the vote!" well knowing that if the sense of the meeting was not in his favour, the votes would be. The matter was put to the vote certainly, but not under circumstances which enable us to judge whether the decision accords with the fair unbiased feeling of the adventurers. Our doubts on this point are strengthened by the resolution of the managing committee, a portion only of which is quoted, since they afterwards go on to express their approbation of his "persevering exertions in bringing the mine to a productive state," as well as of his disinterestedness and integrity; referring, lastly, to his large holding in the mine, and drawing the conclusion that his manifest interest must be, that it should be managed as economically as possible. This testimony at such a juncture is especially valuable, and may serve to outweigh a few hostile votes by proxy, got together to serve a purpose, which does not seem at present very clearly defined, nor very legitimately carried out.

We fully agree in the opinion expressed by the committee, that such personalities and charges are highly injurious to the interest of the company. Assuredly the affairs of the mine are not likely to be satisfactory while those who have the conduct of them are not exempt from groundless hostility. Mutual confidence and union form the basis of mutual prosperity—a point from which proceedings like those at the meeting indicate a striking departure, rather than any result from which benefit to the shareholders can be anticipated.

The question put by Dr. Lang to the dissentients at the meeting—whether any charge existed against Mr. Vatcher, as he considered the step precipitate—was a most pertinent one, and it unquestionably proved that nothing clear or defined had been alleged against him prior to the resolution being submitted. We cannot, therefore, consent to join in the censure attempted to be thrown upon the pursuer of the company, on the strength of the sudden production of doubtful votes, until we have better proof that it is merited than any that has been yet furnished.

Feeling the importance of the question raised with respect to the necessity of proxies being given on stamped paper, we communicated with Mr. Collier on this subject—a very important one, it will be admitted, as affecting the management of any mine worked on the Cost-book Principle. The following is the reply of that gentleman:—

Sir,—I have just received your note, and answer it at once. I am of opinion that proxies, under the circumstances which you put to me, require a stamp. Statute 7 Vic. c. 21 (schedule), imposed a duty of 3*s.* 6*d.* on "every letter, power of attorney, or other instrument, made for the sole purpose of nominating, and a proxy to vote at any meeting of the proprietors, or shareholders, of any joint-stock company, or other company or society, whose stock or funds are divided into shares and transferable." This clearly includes cost-book mines; nor do I think the rule you mention makes any difference. Persons cannot evade the stamp duties by agreement, and I think "any writing under his hand" must be taken to mean such writing as the law requires, and with the incidents which the law attaches to it.—R. F. COLLIER: Wednesday morning.

The opinion of Mr. Collier, it will be seen, is very decided on the point in dispute. He regards the stamp as indispensable to give validity to the proxies tendered on behalf of absent parties. Our impression, we confess, was strongly in favour of this view, since, as Mr. Collier observes, no agreement among the shareholders of any company can be allowed to neutralise a legal provision applicable to such companies. His opinion, based as it seems to be on a right view of the obligations attaching to proxies, will, doubtless, serve as a guide to other companies among whom disputes may unhappily arise, and its publication is likely, therefore, to be of much service. In the case of the shareholders of the Kingsett and Bedford, the recent decision as regards Mr. Vatcher will be set aside, if Mr. Collier's judgment be accepted as the rule of their proceedings—a result not to be regretted, since it will give the opportunity for a cooler and more dispassionate expression of opinion at their next meeting.

Since our remarks were commenced, we have received the subjoined letter from a shareholder, relative to the adjourned meeting to take place on Monday evening:—

Sir,—I beg you will allow me, through the medium of your valuable Journal, to acquaint the "foreign" shareholders in the Kingsett and Bedford Mine, that a firm step has been made in the right direction to place their property under better control, by removing those who have furnished "fictitious" reports for several months past, and also to appoint a first-rate "captain" of good experience and integrity, to develop the hidden treasures of the mine, for the benefit of the present or future adventurers, and the mining interest. The gentlemen who are exerting themselves to effect this improvement deserve the highest praise and best thanks of the shareholders, who should, therefore, render their assistance by proxy (preparatory to the adjourned meeting to take place on Monday evening next), addressed to Lieut.-Col. Harding, Magdalen Hill, Exeter, and which, it appears, should be pre-paid on a half-crown stamp. The attendance of shareholders, conversant in mining matters, is also particularly requested. I beg, Sir, to enclose my card, to show that I am in no way connected with any party, excepting as a suffering—SHAREHOLDER: Preston, Nov. 19.

We see in this letter additional reasons to infer the existence of strong dissatisfaction with the present management of the mine. The precise grounds of complaint have not assumed, so far, a tangible shape, so as to enable us to pronounce on their justice or otherwise; but though left in the dark on many points needful for forming anything like a conclusive opinion, we may be permitted to offer a word of counsel to the shareholders—which is to take care, lest their dissensions be the means of destroying their own property. If any paltry jealousy or rival interests be at the bottom of the hostile demonstration against the pursuer, they should be discontinued at once; while any charges or imputations to which the latter is fairly liable ought to be openly made and established.

So common is the practice, however—as the records of mining companies will show—of indulging in unfounded charges and angry recriminations, when the affairs of a mine are less flourishing than could be wished, that it would be nothing wonderful if the Kingsett and Bedford were to prove no exception. It would be surprising, perhaps, if it were otherwise, so keen is the appetite for censure, when a body of shareholders are undergoing the process of a drain upon their pockets. If "fictitious reports" have been made, it has been by the superintendent and captain, both of whom were present to justify their reports, which, we understand, have however been confirmed by other practical miners; and, probably, if the shareholders generally, instead of dwelling upon the mistakes and misfortunes of the past, were to agree upon a wiser plan of operations for the future, wherever amendments can be really introduced, they might look for a more fortunate issue to the undertaking than can be anticipated at present.

THE EAST OF SCOTLAND MALLEABLE IRON-WORKS.—At the adjourned sale, which took place at Dunfermline, on the 6th inst., these works were, with the estate and mansion-house of Tranay, sold for 15,000*l.* to Baring Brothers and Co., the great London capitalists. The works are to start in a short time.



## Mining Correspondence.

On the 19th ult., the brig *Minnesota*, cleared from Chicago, on Lake Michigan, with copper ore from Lake Superior, for Swansea.

**IRON PERMANENT WAY OF RAILWAYS.**—It appears that the experience of the last few months ago upon the Southern Railway has shown that the iron permanent way laid down by the Eastern Railway have stood the wear and tear of a heavy traffic in a satisfactory manner. The cost of renewal alone of wooden sleepers is estimated at about 70¢ per mile per annum, and as there are at present above 6000 miles of railway in operation, this forms a large item in railway expenditure. A permanent way not only tends to increase the tractive power of the engine, but reduces the ordinary cost of repairs of the working stock. It is stated that tenders from eminent contractors have been received to maintain and repair the iron road for the same amount that it now costs to maintain the ordinary permanent way.—*Times*.

**LAMHEROOE WHEEL MARIA.**—About 25 fathoms in the adit level the course of the lode, a winze is sunk 3 fms. on the course of the dip of the lode, &



# THE MINING JOURNAL.

...the shaft, and the size of the winch is 9 ft. in length by 7 ft. in diameter. It appears to have entered a few feet below the adit into a very large lode, principally composed of black, grey, and blue deposits of copper and gossan, in large masses, intersected by branches of yellow ore and muddle. The bunches, or layers, of muddle, and nodules of black and grey ore imbedded in them; this is the composition of the lode, as yet discovered in breadth. The western wall terminates by a conglomerate of compact black ore, and then occurs a fair conical clay-slate; the southern wall has not been discovered; a bunch, or course of muddle, containing rich copper, forms the southern part of the winch at present; this will be cut through as speedily as possible, when I hope to report again to you on the splendid appearance of this lode. As regards value, it would be difficult to put a price on it at present in this slight excavation. Capt. Tabb has 7 or 8 tons of excellent ore raised, besides large stones of gossan, &c. I think, from present appearances, connected with the old kilas we are entering, that we may contemplate this as a most brilliant discovery.

**LWYNMALES.**—The mine generally looks well. In the 8 ft. level west we have a promising lode, but without ore at present. In the 14 ft. level west we have a lode 15 in. wide, of good mixture, which will yield about 25 cwt. per ton. The stopes over the 8 ft. level, and the western winch, are looking quite as well as last reported.

**MINERAL COURT.**—Sixty-two men are stopping on tribute, and raising tin in large quantities. Capt. Dale, who is a very cautious man, says he will pay cost this month, and have a good batch for sale in December. The sump-shaft is sinking fast through easy ground, and so satisfied are they that the 40 fathom level will turn out well, that they are taking down the backs as fast as possible, and are in high spirits.

**NORTH BASSET.**—The lode in the 82 is much improved. The last 6 ft. driving is now 4 to 5 ft. wide, composed of pryan and large stones of grey ore. In the 73 ft. level is 2 1/2 ft. wide, composed of spar and yellow ore. In the 68 the lode is 5 ft. wide, a splendid lode of grey ore and gossan; in the winch sinking below this level the lode is 5 ft. wide, composed of spar and yellow ore. In the 53, west of Lyle's shaft, the lode is 1 ft. wide, composed of grey ore and gossan. No alteration in the tinwork operations.

**PEN-Y-BANK AND ENGLADD (UNITED).**—The lode in the adit, driving east, is from 4 to 5 ft. wide, composed of kilas, mixed with spar and lead ore, but not of much value. The winch is up, and we are clearing and securing the shaft with all possible speed, but find it rather troublesome, it having run together in many places.

**PENTIRE GLAZE AND PENTIRE (UNITED).**—The stopes in the back of the adit level, on the north lode, are still yielding a fair quantity of ore. The south stopes have improved since last reported. The stopes in the back of the 10 ft. level, under the adit, on the new or middle lode, are still looking well, and are likely to yield large quantities of ore. We have done but little on the newly-discovered copper lode of the past week, having had to take down the lead lode, which still looks well. The engine-shaft is now down 12 fms. below the 10 ft. level, and I shall now push on the driving of this 22 fathom level towards the grey ground, which, I have no doubt, will tell an important tale.

**SOUTH TOLGUS.**—The north lode, in the 54 ft. level west, is 2 1/2 ft. wide, yielding some very good stones of ore, and looking very promising. The south lode, in the 54 east, is 3 ft. wide, yielding 1 ton of ore per fm. In the 42 east the south lode is yielding 1 ton per fm.; in the same level west it is yielding 1 ton per fm. The north lode in the 15 west, is yielding 1 1/2 ton per fm. Ore sampled for sale next week, 224 tons.

**SOUTH WHEEL TRELAUNY.**—We have extended the cross-cut east of shaft, in the 60 ft. level, about 7 fms., and also intersected the lode; it is about 2 ft. wide; I also think it is the same as we had to the 55, east of the shaft, but I am sorry to say that I do not see any improvement in it; it is unproductive for lead, and similar in character to the 50, composed of muddle, kilas, flookan, and spar; it is discharging a little water, but not much. I have also set 2 fms. north and 2 fms. south at 17, 10 ft. per fathom, to see whether it will improve or not. The ground is very favourable for exploring. There will be some timber wanted almost directly for repairing the winch, and to timber and case down the shaft, in order to throw the kibble to the 60.

**TAMAR SILVER-LEAD.**—In the 205 end, driving south, there has been no lode broken since last reported on. In the 190 and the lode is 18 in. wide, producing work of a coarse quality. In the 175 end the lode is 2 ft. wide, 1 ft. of which is good saving work. In the 160 end we are driving south on the eastern part of the lode, which is about 3 ft. wide, composed of can, capel, and ore—the remaining part will be taken down by the tributors. In the 145 end the lode is 2 1/2 ft. wide, grey throughout, and opening ground of a profitable character. Spurr's shaft is down to the 160 ft. level, and the men employed to case and divide the shaft—as soon as this is done we shall commence driving north and south in this level. At north mine, in the 90 ft. level, we are cross-cutting west, as the main part of the lode appears to be in that direction. In the 80 fathom level the lode is 2 ft. wide, 6 in. of which is rich work. In the winch sinking below the 70 ft. level the lode is 2 1/2 ft. wide, and yielding work of a good quality. Our last parcel of ore, computed 83 tons, was sold to Locke, Blackett, and Company, at 18 1/2, 6d. per ton.

**TINCROFT.**—On Highburrow tin lode, in the 152 ft. level, east of engine-shaft, the lode is 1 1/2 ft. wide, worth 18 1/2 per fm. In the 143 ft. level, east of Martin's east shaft, the lode is 4 ft. wide, worth 30 1/2 per fm. In the 133 ft. level, east of the lode is 4 ft. wide, worth 16 1/2 per fathom for tin and copper; in the winch sinking below this level the lode is 6 ft. wide, worth 15 1/2 per fathom for copper. In the 120 ft. level, west of engine-shaft, on Chapelle's lode, the lode is 3 ft. wide, worth 12 1/2 per fm. In the 100 ft. level, west of Downright shaft, the lode is 5 ft. wide, worth 12 1/2 per fm. for tin and copper; in the winch sinking below this level the lode is 6 ft. wide, worth 18 1/2 per fm. for tin and copper. In the winch sinking below the 90 west the lode is 7 ft. wide, worth 30 1/2 per fm. for copper. In the 80 ft. level, west, is 8 ft. wide, worth 55 1/2 per fm. for copper. In the 70 ft. level, the lode is 7 ft. wide, worth 50 1/2 per fathom for copper; in the rise in the back of this level the lode is 5 ft. wide, worth 50 1/2 per fathom for copper. At North Tincroft, the lode in the engine-shaft is 5 ft. wide, worth 12 1/2 per fathom for copper. In the 110 ft. level east the lode is 3 ft. wide, worth 9 1/2 per fathom for copper; in the west end, same level, the lode is 4 ft. wide, worth 12 1/2 per fathom. In the 100 ft. level west the lode is 5 ft. wide, worth 16 1/2 per fathom for copper; in the 100 ft. level, east of Willoughby's shaft, the lode is 5 ft. wide, worth 10 1/2 per fathom for tin and copper. In the 90 ft. level east the lode is 4 ft. wide, worth 10 1/2 per fathom for tin; in the 90 ft. level, west of engine-shaft, the lode is 3 ft. wide, worth 12 1/2 per fathom for copper; in the winch sinking below this level the lode is 5 ft. wide, worth 18 1/2 per fm. for copper. In the 90 ft. level, driving west on south lode, the lode is 2 1/2 ft. wide, worth 5 1/2 per fathom for copper. In the 100 fathom level, driving west of Palmer's shaft, on East Pool lode, the lode is 2 ft. wide, with spots of ore. In the 90 west the lode is 3 ft. wide, worth 5 1/2 per fathom for copper. In the 80 ft. level west the lode is 3 1/2 ft. wide, worth 5 1/2 per fathom for copper. We have now commenced driving a new shaft, and shall now commence to draw at that shaft from Dunkin's lode, and clear out the levels, &c., of that part of the mine.

**TREBEL CONSOLS.**—I feel highly pleased with my visit to this mine. I was met by Capt. Williams (our agent), and Mr. Verran, our purser, by appointment, who took great pains in showing me the various lodes; I also broke samples of the tin ore, which I have brought for the use of the office, and for the inspection of our shareholders. I had no idea of the value and extent of our sets; there are three tin lodes, two of them are 12 ft. wide, and producing good saving work; the other is about 3 ft. wide, producing tin of a very superior quality. There are also two copper lodes north which have not yet been wrought; these, I understand, are a continuation of the rich copper lodes discovered in Tretoit, Tregrillon, Lanivet Consols, and Wheel Measures Mines, which I am told produced about 100,000 lb. worth of copper. The lodes are imbedded in a stratum, where the kilas and granite meet in a granite hill, similar to that of South and West Caradon, Carn Breva, and Trevaun Mines, which are well known to be some of the best mines in Cornwall. I should like more of our shareholders to visit the mine, as I am confident they would feel highly gratified at our prospects, and well repaid for their trouble. Capt. Williams strongly recommends our getting up an engine early in the spring, when we shall be able to make large returns.

**TRELEIGH CONSOLS.**—Christie lode: In the 100 ft. level, west of Garden's lode, the mine is rising against the winch in the bottom of the 90 ft. level—lode 1 ft. wide, not much ore. In the 90 ft. level, east of ditto, the lode is 3 ft. wide, worth 16 1/2 per fm.; in the winch below this level the lode is 16 in. wide, but little ore; in the stopes above this level, west of Harrie's winch, the lode is 2 ft. wide, worth 15 1/2 per fm. In the 80 ft. level, west of cross-cut, on the north part, the lode is 18 in. wide, with stones of ore. In the 70 ft. level, west of Garden's lode, the lode is 20 in. wide, worth 6 1/2 per fathom. —Parent Lode: In the 52 ft. level, west of Parent engine-shaft, the lode is 18 in. wide, with stones of ore; in the same level, east of ditto, the lode is 20 in. wide, but little ore. In the 40 ft. level, west of Whal Sparrow, produces 1 ton per fm. A subsequent report states that the cross-cut in the 90, east of Bennett's shaft, has been cut through the lode, and the lode looking quite as good as it was west of the cross-cut, producing 9 tons per fm. Bennett's shaft also looks well, and the stopes in the back of the 90 are a little improved.

**TYWANHAYLE.**—The lode in the 100 ft. level, west of Gardiner's shaft, is large, and of a more kindly appearance; the same level east is approaching the run of ore ground from the 90. The 90 ft. level east has reached the cross-course, up to which it was quite as productive as ever. The 80 ft. level east is better, producing 2 1/2 tons of ore per fm. The lode in the 64 ft. level east, on South Towan, is improved, producing 2 1/2 tons per fm. The 23 ft. level, east and west, at Wheel Fancy, each produce 1 ton per fm. The 40 ft. level, west, on United Hills lode, produces 1 ton per fm.; the same level west, in Whal Sparrow, produces 1 ton per fm. A subsequent report states that the cross-cut in the 90, east of Bennett's shaft, has been cut through the lode, and the lode looking quite as good as it was west of the cross-cut, producing 9 tons per fm. Bennett's shaft also looks well, and the stopes in the back of the 90 are a little improved.

**WARLEGGAN CONSOLS.**—We put our stamps to work on the 14th inst. The shafmen have nearly completed the plat. After this is accomplished, I intend to put four men to clear the adit east, and four or six, as we can best manage, to work on the lode in the adit, to raise work for the stamps. The tin ground about the trial shaft being nearly worked out, we intend to commence clearing our tin next week, and hope in about a fortnight to be ready for sampling.

**WELLINGTON.**—The lode in the 50 ft. level, east of the engine-shaft, is 15 in. wide, very promising for copper ore; in the same level west we have intersected the slide, and shall now drive on its course to intersect the lodes north—that is, Nos. 1 and 2; No. 2 is the lode that we have been raising tin from in the 7 ft. level and I am led to think it will prove something good at a deeper level. The lode in the 42 ft. level, east of Parcolly shaft, is 15 in. wide, producing copper ore and tin, worth 6 1/2 per fm.; in the same level, west of the engine-shaft, is quite changed, being very fair for driving, and showing some good indications. The ore ground at and about the western winch-shaft still continues good; the lode in this shaft is from 2 to 2 1/2 ft. wide, and is worth for copper 34 1/2 per fm.

**WEST BASSET.**—Six pitches have been set on tribute from 10s. to 13s., and there are now at surface about 16 tons of ore broken last month. The winch is holed from the 42 to the 52, and driving will be commenced immediately on the two lodes. The water is down 8 fms. below the 52, and still sinking.

**WEST GOGINAN.**—We have suspended all operations in the engine-shaft for the present—the water being powerful. We have cleared out some of the old men's workings, and found two lodes which have been cut and driven on several fathoms—the north one of which is at present 4 ft. wide, composed of kilas, with a beautiful mixture of gossan and lead ore. This lode has a very promising appearance at this depth, 9 fms. from surface, but will make a higher back as it approaches the eastern ground; we have commenced driving on this lode by four men, at 4 1/2 lbs. per fathom. The other lode is about 5 fms. south of the above, and running also in an easterly direction; it is 6 ft. wide at present, composed of kilas, gossan, and lead, with spots of lead ore. I think it is a promising-looking lode as can be seen at that depth. We are preparing to drive on this lode by four men, at 3 1/2 lbs. per fathom, and have commenced cutting a plat to deposit the stuff in, as per bargain, 4 1/2.

**WEST TOLGUS.**—The engine-shaft is sunk 6 1/2 fms. below the adit level, in which the lode is 2 ft. wide, with a very favourable appearance, and will produce about 2 tons of ore per fm.; the ground is also very easy for sinking, 7 1/2 per fm.—eight men

and four boys are employed in this shaft. The lode in the adit end west is about 1 ft. wide, with occasional stones of ore, and the ground is easy—two men and two boys are employed in it. We are also employed in sinking a shaft from the surface by four men in the said adit end.

**WEST WHEEL JEWEL.**—The 70 fathom level, west of Williams's cross-course, on Wheel Jewel lode, is worth 4 1/2 per fm.; the winch in the same level, west of ditto cross-course, is producing stones of ore. The 57 ft. level, west of Hodges's cross-course, on Tolcarne tin lode, is worth 30 1/2 per fm.; ditto, east of ditto cross-course, on the same lode, is worth 6 1/2 per fm. The winch in the 30 ft. level, west of Quarry shaft, on the same lode, is producing stones of tin. The shallow adit level, west of Tregring's shaft, on the same lode, is worth 6 1/2 per fathom. The stopes west of Pryor's winch, in the back of the 12 ft. level, on the same lode, are worth 15 1/2 per fm. The stopes east of Tregring's shaft, in the bottom of the 12 ft. level, on the same lode, are worth 30 1/2 per fm. The stopes west of Tregring's winch, in the bottom of the same level, on the same lode, are worth 27 1/2 per fm. These stopes are working on tribute.

**WEST WHEEL TOWAN.**—Taylor's engine-shaft is secured to the bottom of the mine, and preparations made for sinking below the 90 ft. level. The lode in the end of the 30 is 3 ft. wide, composed of fine stones of ore and soft spar. Caroline's shaft is down 6 fms. below adit, through a fine kilas, thickly impregnated with rich branches tin, some 4 in. wide, passing from one lode to the other, which is about 13 ft. The lode in the bottom of the winch, on the middleworks, is 18 in. wide, with fine stones of ore, and very kindly indeed. Wheel Tyn lode has been cut, and is looking well; the leader part of it is 6 in. wide, good work for tin.

**WEST WHEEL VIRGIN.**—Our engine-shaft is now down 2 fms. under the 9 ft. level, and we have a good lode of tin in the shaft, from 18 to 20 in. wide. We shall now put eight men in the shaft, and sink with all speed. Our prospect is better than ever it was; all that is required is to sink shaft and open ground, to put more men to work.

**WHEEL ADAMS.**—The 72 ft. level, driving south from the engine-shaft, is favourable for driving; the ground in the end is partly white, and a small portion of the elvan in the western side, which we daily expect will leave the end entirely; there are also small branches of barytes and quartz, with spots of lead and muddle. The stopes in the bottom of the 60 are carried about 5 ft. wide, and will turn out about 3 tons of lead per fm.; the lode in the back of the 60 is producing nearly 2 tons per fathom; the stopes, or pitch, at the south boundary, will turn out full 3 tons of lead per fm.; at the extreme boundary, the lode is better than it is at the north end of the stopes. Since last reported on, the Guncels will average from 4 to 5 ft. wide; a part of the lode is still standing in the side. In the 40, driving north from the engine-shaft, there are branches of quartz, about 4 in. wide, with spots of lead and Jack in fine white ground. I know of no alteration in the pitches; the lode in the rise, north from the old shaft, in the back of the 40, is 2 1/2 ft. wide, producing about 10 cwt. of lead per fathom; in the cross-cut, driving west from the shaft, the ground is good and kindly, with water coming therefrom. The rise in the back of the 25 is poor; the lode is disordered.

**WHEEL ARTHUR.**—We are down within a very short distance of the back of the level in the Old Hundred shaft; the ground in clearing has proved very favourable, and, in a few days, I shall be able to set pitches on tribute; but, before setting, I will send you specimens of the ore, and inform you, to the best of my judgment, from the appearances in sight, what is its worth per fathom, and also at what rate it should be set to the men. You shall hear again on Monday next.

**WHEEL CREBOR.**—Marchion's shaft is cleared and timbered 8 fms., and 2 fms. more to clear, which I hope to have done, and the lode seen next week, if the heavy rains do not cause too much water in the same. The other operations are going on favourably, and the lodes are just as last reported. The engine, pitwork, &c., are in good working order.

**WHEEL EMILY.**—I have carefully assayed the different samples of ore from this mine, and find the produce as follows:—No. 1 is what Mr. Broad gave me, produce 53 cwt. of silver to the ton. No. 2 is a stone of gossan from the back of the lode, produce 30 cwt. of silver to the ton. No. 3, a stone of antimony I selected on the floors, produce 19 cwt. to the ton. No. 4, a stone of gossan I broke in the deep adit, produce 16 cwt. to the ton. No. 5, blue flookan, produce 24 cwt. to the ton. No. 6, a stone Capt. Wilcock gave me, produce 14 cwt. to the ton. W. Kwoz, Agent to Wheel Langford.

The following report has been received from Capt. J. Pomeroy:—"I inspected Wheel Emily Silver-lead Mine on behalf of the proprietors, and found the lode to be a very promising and productive one. The lode in the back of the 12 ft. level is from 2 ft. to 2 1/2 ft. wide, carrying a beautiful flookan, and two well-defined walls; there is a great deal of ground laid open in the level, so that a quantity of ore can be brought to the surface at a very small outlay; as far as I can judge of the piece of ground in the back of the 12 ft. level, it can be taken away for 50s. per fm.; I am certain there is a quantity of silver-lead ore in the bottom of the same level. I am informed by Captain Gregory, agent of the mine, that there is a real good lode making down on the back of the deep adit, and there is a few fathoms of ground in the shaft to be left to leave water down into the adit, and then, by extending the deep adit level on the course of the winch, sufficient ground will be laid open to bring hundreds of tons of ore to market, so that I consider, from a small outlay, great profits might be derived from that mine, the ore being of such value. I had the ore assayed on the 28th Feb. last, by James Harvey, of Tavistock; they were 3 in 30 for lead, and 95 cwt. of silver to the ton, and a small portion of copper ore. There is no doubt of great profits being derived from that mine."

**WHEEL HARRIS.**—In the cross-cut south, in the 25 ft. level, the water is decidedly increasing; the ground is soft, and characterized by pretty much spar, in which at times spots of lead are discernable, showing the mineralized state of the ground about the lode, and looking well when intersected.

**WHEEL LANGFORD.**—We have now nearly prepared for the market 25 cwt. of silver ore of a moderate quality, also about 4 cwt. of a good quality, and hope in the course of three or four days to have more to add to the latter. We have not cut the silver lode to the south as yet. Our copper lode is just as last reported.

**WHEEL MARY ANN.**—Pollard's shaft is sunk 9 fms. under the 60 ft. level, where the lode is 3 ft. wide, and worth 12 1/2 per fm. We calculate to sink this shaft to the 70 ft. level by the end of this month, when we shall commence driving north and south on the lode. The lode in the 60 ft. level, south of the shaft, is 5 ft. wide, and worth 25 1/2 per fm. The lode in the 50 ft. level, south of the shaft, is 2 ft. wide, and worth 7 1/2 per fm. The lode in the 40 ft. level, south of the shaft, is 1 ft. wide, producing some good stones of lead. The lode in the 70 ft. level, south of Barratt's shaft, is 2 1/2 ft. wide, worth 14 1/2 per fm. The stopes throughout the mine are very productive. In conclusion, I beg to say that our prospects are highly encouraging.

**WHEEL PROVIDENCE.**—Since the last report, a new head has been discovered going off from the main lode, east of the winch-shaft—being 18 in. wide, composed of spar and muddle, impregnated with copper. The lode in the adit end east is still more promising, and is now carrying a flookan on the footwall, 4 in. wide, thickly impregnated with lead, and of high character. The building of the engine-house is proceeding with all speed. There is now ready for breaking a quantity of silver lead ore, standing in the bottom of the adit level, west of the winch-shaft.

**WHEEL SPRY.**—The lode, which is seen nearly to the present end, exhibits the same beautiful gossan, with muddle and copper ore deposited in it; a fine flookan also runs along with it. It is impossible for us, however, to clear into the present end until we adopt some means for the transmission of air for the men to work. For this purpose a shaft is now set, to be sunk from surface to the present adit end, which we hope will be accomplished in a few weeks. As this will be sunk on the course of the adit at the eastern extremity of the adit level, it will of course prove of what kind it is for about 30 fms. in depth. This shaft, when completed, will enable us to continue on the adit level to a great distance, and to prove the silver-lead lode already intersected in this level. At some distance from the present adit end another silver-lead lode remains to be intersected, which the present shaft now sinking will, by a fresh supply of air, sufficiently ventilate the mine to enable us to accomplish this object. When this is accomplished, which we hope will not take longer than three or four months, we shall be better able to ascertain a proper position for a steam-engine. There is good reason to expect we shall meet in these explorations sufficient mineral to cover all the expense that may be incurred thereby. Had there been a good supply of air, two or three tribute pitches could be set to work immediately in the back of the adit level; but we can do nothing until the shaft is sunk.

**WHEEL TRELAUNY.**—At Phillips's shaft, in the 62 end north, the lode is 2 ft. wide, worth 4 1/2 per fm. Trellaw's shaft is sunk 2 1/2 fms. below the 92; the ground is without alteration. In the 92 end north the lode is 3 1/2 ft. wide, worth 10 1/2 per fm.; in the same level south the lode is 2 1/2 ft. wide, worth 11 1/2 per fm. In the 82 north the lode is 3 ft. wide, worth 9 1/2 per fm.; in the winch in the bottom of this level the lode is 3 ft. wide, worth 10 1/2 per fm. In the 73 north the lode is 2 1/2 ft. wide, worth 10 1/2 per fm. Our stopes in this part of the mine are looking fair. At the north mine, Smith's shaft is sunk 5 ft. below the 55 ft. level; the lode is 2 ft. wide, worth 5 1/2 per fm. In the 55 end north the lode is 2 ft. wide, worth 8 1/2 per fm.; in the same level south the lode is 2 ft. wide, worth 6 1/2 per fm. In the 40 end north the lode is without alteration. Our stopes in this part of the mine are as usual.

**WHEEL TREMAYNE.**—At Madron's shaft, on the south lode, in the 70 ft. level west, the lode is 2 1/2 ft. wide, worth 9 1/2 per fm. In the 60 ft. level west the lode is 20 in. wide, worth 4 1/2 per fm. In Thomas's shaft, sinking under the 50 ft. level, on the same lode, the lode is 2 ft. wide, worth 3 1/2 per fm. At Lannier's shaft, on the north lode, in the 30 ft. level west, the lode is large and unproductive. At middle winch-shaft, on the same lode, in the winch sinking under the 10 ft. level, the lode is unproductive. In the cross-cut driving north in the adit level of the same shaft, we have not intersected the north lode yet. At Champion's shaft, on the same lode, in the 10 ft. level east, the lode is 2 ft. wide, opening tribute ground. Since our last report, we have commenced sinking Shagg's shaft on Wheel Bonnett lode, under the 40 ft. level; the lode in the bottom of said shaft is 8 in. wide, worth 4 1/2 per fm. We have also commenced driving a cross-cut north of our engine lode, 50 fms. west of Williams's engine-shaft, to intersect a north lode; we have 24 fms. driving to cut the lode; the ground is favourable for driving. At Painter's flat-roof shaft, on the south lode, sinking under the 40 ft. level, the lode is small and unproductive. We expect to get the sump down to the 50 fathom level by the end of this month. The 40 ft. level east is suspended; the lode is small and poor; the men are now engaged sinking a winch in the same level; the lode in the bottom of the winch is 10 in. wide, opening tribute ground; in the 40 ft. level west the lode is disordered and split in two parts, making horse and lode altogether 2 ft. wide, opening tribute ground; in the stopes in the back of the same level the lode is 18 in. wide, worth 10 1/2 per fathom; in west, unproductive. The 30 ft. level, sinking under the 30 ft. level, the lode is 18 in. wide, unproductive. The 20 ft. level, west of ditto, the lode is 20 in. wide, producing stones of ore not of much value, but having a very kindly appearance; in the cross-cut driving south, in the same level, we have intersected a branch 2 in. wide, producing spots of ore; the men are still engaged cross-cutting further south. In the boundary engine-shaft, sinking under the 53 fathom level, the floors of spar reported as destroying the branches are speedily disappearing, and a clean kilas coming in, the branches appear to be improving—they are now worth 30 1/2 per fathom. Our tribute department is looking much the same as it has for some time past.

## FOREIGN MINES.

**COPIAPO MINES.**—Mine report, dated Tres Puntas, Sept. 24:—

**COPPER MINES.**—Chico. In driving the 24 ft. level to the east of Harman's shaft, we have a lode of 4 ft. wide, 18 in. of which is ore from 30 to 35 per cent. The stopes continue to yield a fair quantity of good quality ore.

**SAN PEDRO.**—We have not yet formed the communication here, spoken of in former reports, but are expecting to do so daily; and the consequences are, we have not raised so much for the last two months as formerly, having, as I before said, all our men engaged here.

**LA COMPANIA.**—During the present month we have continued to sink the shaft, in which we have a large lode, giving occasional stones of ore. In the 10 ft. level, now being driven east, we have a lode 15 in. wide, of very rich quality ore. In the winch, driving west, the lode is 18 in. wide, and we have done the stopes in the back of the 10 ft. level are looking well, and producing ore of good quality.

**LA REINA.**—In this mine we have a very large lode of a promising character, although

I am sorry to say it does not produce a great quantity of shippable ore; yet, there is every prospect of its becoming richer in depth. The gold ore raised here, of which I advised you in my last, has been returned; it gave near 6 oss. We have not in the present month raised any; however, we hope to meet with the branch on the other side of the slide.

**FLAMENCO.**—SAN AUGUSTIN.—In the shaft we have still a very large lode, composed principally of gossan, with good deposits of ore. In the adit level west we have also a large lode, and at present producing 2 tons of ore per fm.; with this level I am much pleased, for the character or class of ore is becoming changed from a dark iron grey to a rich bronze, which we consider a very favourable indication.

**SAN CARLOS.**—We have been opening ground here in both levels during the present month, but not so fast as we could wish, solely for the want of labourers. This, for the present, we have got over, having got some fresh hands, and the work is now progressing satisfactorily.

Produce for August—Chico ..... Tons 20  
" San Pedro ..... 8  
" La Compania ..... 18  
" La Reyna ..... 6  
" San Augustin ..... 8—54 tons.

**SILVER MINES.**—AL FIN HALLADA.—In the 5 ft. level, both north and south, the lode is from 2 to 15 in. wide, of about 200 marks to the cajon. In the 15 ft. level the lode is 2 ft. wide; regarding this level our anticipations are high, knowing that shortly we shall come in contact with some cross lodes. In the 20 and 25 ft. levels no ore has been taken down for the present month, but where broken into it is looking very well. In the two other labores to the north the lode is 2 ft. wide, and throughout thickly interspersed with "metallic iron." During the present month we have sent you near 2 cwt. of ore of about 200 marks to the cajon. At present we have in the cancha about 4 tons, and we shall resume breaking down, again in the beginning of October, when I have no doubt we shall have a good quebrada.

**SAN JOSE DEL CARMEN.**—In this mine we continue to raise a little ore of low ley, and are progressing, although slowly, satisfactorily. We hope, by and by, to meet with the root, or foundation, from which so much silver was found at the surface.

**MEXICANTAS.**—We have nothing new here to report on, not having as yet holed the shaft, but hope to do so in a few days. In the different labores the lode is looking very well, and carrying every indication of an early alcance.

**CARMEN ALTO.**—During the present month we have resumed the driving of the 16 ft. level, in which we have a large well-defined lode, giving a little silver, but not enough at present to pay for returning. In the other parts of the mine we have nothing new.

**COLORADO.**—Our prospects here are much the same as last month. In sinking in the bottom we have a large lode, of a beautiful character, and in driving both north and south the lode is precisely the same. The ground also is quite congenial for a rich silver lode; and, as I have before said, and still maintain, it requires only time and perseverance to develop its rich resources.

**SANTA ANA.**—In this mine during the present month we have been raising some good ore, and I am happy to say the improvement spoken of in my last has not in the least diminished. The lode is from 6 to 18 in. wide, composed of "metallic iron," and ruby silver, some stones of which I have sent you to be assayed. We have not got on so fast with opening ground as I could wish, through the illness of one of our Englishmen, in addition to which the "dev-y-ocho" has taken place, during which time nothing has been done; but I suppose we must not complain, for we are as well off as our neighbours, and even better, for our Englishmen have all worked throughout the time.

**GOLD MINES.**—DESCUBRIDORA DE ORO.—Our prospects here continue gradually to improve. We have in the present month raised about 12 carags of gold ore, which is now being returned, and I think it will give from 14 to 16 oss. of gold. We have also raised about 3 tons of copper ore, of 35 per cent. In each of the labores we have a lode 7 ft. wide, giving ore both of gold and copper, of an average quality.

**SANTO DOMINGO.**—The lode in the chiflon is nearly 3 ft. wide, composed of gossan, interspersed with sprigs of gold. In the level above we continue to break a little ore of low ley. The ore returned nearly 4 oss. of gold, which I have sent you.

**SEGUNDA ESPERANZA.**—We continue to drive the cross-cut on the manto, which is 1 ft. wide here. We hope shortly to meet with the lode, which, if we may judge from appearances, ought to give us something good.

In conclusion, allow me to remark, that, on the whole, I think, ere long, we shall have some rich mines, in addition to those that, for some time past, have been yielding good returns. The remittance in silver, expected by this mail, has not been received, but may be expected next month.

**LINEARES MINES.**—The following has been received from Mr. H. Thomas:—  
Lineares, Nov. 9.—We find a good lode in the bottom, east of San Pablo, and also between San Pablo and La Manca. The men have been at work since Monday in drawing out the water from the "Tuniso," which was the deepest part reached by the old work-braze, and, for a short length, 12 tons to a fm. The water has been so much here, that although the depth is not more than from 3 to 4 fms., and the workings comparatively inconsiderable, we have not yet been able to get to the bottom, and it may be two or three days before we can see it. Shaw's shaft being now communicated, and drawing from the 45, we have set the plat to cut to the shaftmen for No. 3000. Some lead will be broken during this cutting, as at the point of communication with the old work-braze, a lode worth 4 tons a fm. In the 31 ft. level, driving east of Shaw's shaft, now cut a good lode, worth 3 tons to a fm., and is more settled and favourable than we have hitherto seen it. The men's stent of 4 varas being out, we had led to them at Rs. 200 per vara, instead of 250, with a real the araba for lead. The lode in the 45 ft. level driving east is at present poor; it was so also in the 31 ft. level over this end; but as in that level a favourable change has taken place, we look for the same in the 45 very soon. In San Antonio the lode has improved, and is now worth 1 ton per fm. in the cross-cut, and there is no change worth notice at San Juan shaft, nor in the tribute pitches, which are generally doing well.

| Stock Account.                     |       | Tons | Cwts. |
|------------------------------------|-------|------|-------|
| November 2.—Ore in stock at Linare |       | 110  | 12    |
| 9.—Weighed in                      |       | 23   | 16    |
|                                    | Total | 136  | 8     |
| Sent for shipment                  |       | 14   | 0     |
| Remaining in stock at Linare       |       | 122  | 8     |
| Baylen                             |       | 31   | 18    |
| Seville                            |       | 9    | 16    |
| Malaga                             |       | 17   | 0     |
| On board ship                      |       | 372  | 10    |
| Total in stock                     |       | 553  | 12    |



JOHN LABOUCHERE, Esq., in the chair.  
After the usual preliminaries, the CHAIRMAN read the following

Some discussion followed respecting that portion of the mine called Wilson's, formerly worked and abandoned. Mr. THOMAS expressed his decided opinion that it would have been a good speculation, but for the difficulty with respect to the water, arising from a spring at the foot of the mountain, and to obviate which it would be necessary to commence an adit level to cut off the spring. The early workings of Wilson's the ore produced 10 per cent. on an average. By driving an adit they might come upon two lodes, but it would take

At a general meeting of adventurers, held at the offices, Threadneedle-street, on the 19th inst. JOHN DAVE, Esq. in the chair.

The following report, from Capt. J. Hayo and W. Sincovek, was read:—  
*Adit No. 13.*—The mine is now thoroughly cleared and drained to the 50 ft. level these levels have been extended 6 fms. east and 4 fms. west. The lodine in the eastern was very promising for 3 or 4 fms, and produced for that distance about 1 ton of at present it is not so good, and it is not clear what might have expected this, as we had a good deal of ore directly above it in the 50, which squeezed up the lode for 4 or 5 fms. The 60 west there is a lode about 9 in. wide, which has a favourable appearance, but is producing much ore; we have risen about 2 fms. in the back of this level, but the has been small and poor. The 50 east has been driven about 6 fms. through a lode 24 ft. wide, which has a promising appearance, but does not contain any ore. The

### MINING PROJECTS.

ELECTRIC TELEGRAPH COMPANY

**DISCOVERY OF A LEAD MINE NEAR GALWAY.**—About a mile distant from

hich have been thro'n down some time since by order of the landlord, a Mr. Jones, of Dublin, who holds those lands under the Warden of Galway. Some of the peasantry, being lately employed in clearing one of the foundations, discovered what they thought to be a quantity of silver ore mixed with the stone. The story soon spread; a number of the country people came and commenced operations in their rude way, of course quite unproductive. A captain of a mining company, at Scariff, was sent for, who came and examined the mine ore, and declared it an excellent rich lead mine, taking samples of it to Dublin, where he is now in treaty with Mr. Jones. While the captain was here, samples taken from Outeart were shown him, that is now being raised on the lands Mr. E. O'Flaherty.—*Galway Mercury*.



### Current Prices of Stocks, Shares, & Metals.

| <b>STOCK EXCHANGE.</b> <i>Saturday morning, Eleven o'clock.</i>                     |                                       |
|---|---------------------------------------|
| Bank Stock, 9 per Cent., 219 3/4  | Belgian, 41 per Cent., 80             |
| 3 per Cent. Redempt. Ann., 94 1/2   | Dutch, 41 per Cent., 562 7/8          |
| 3 per Cent. Consols Ann., 97 6 1/2  | Brazilian, 5 per Cent., 86 7/8        |
| 3 1/2 per Cent. Ann., 97 1/2  | Chilian, 4 per Cent., 101 1/4         |
| Long Annuities, 71  | Mexican 5 per Cent., ex Coup., 91 1/2 |
| India Stock, 10 1/2 per Cent., 371  | Russian, 5 per Cent., 108             |
| 3 per Cent. Con. for Acct. 11th Dec. 97 6 1/2                                       | Spanish, 5 per Cent., 172             |
| Excheq. Bills, 1000 <i>l.</i> , 1 <i>l.</i> d. 6 <i>s.</i> 6 <i>9</i> <i>s.</i> pm. | Ditto 3 per Cent., 39 1/2             |

| FOREIGN STEEL.                    |    |       |     | SPELTEN. 12.             |                    |
|-----------------------------------|----|-------|-----|--------------------------|--------------------|
| Swedish keg .....                 | 14 | 10-14 | 15  | Plates, warehoused ..... | per ton 16 5-16 10 |
| Ditto faggot .....                | 15 | 0-15  | 5   | Ditto, to arrive .....   | 16 0-16 7 6        |
| ENGLISH COPPER.                   |    |       |     | SING. 8.                 |                    |
| Sheets, sheathing, & bolts, s. b. | 0  | 0     | 0 1 | English sheet .....      | per ton 20 0-21 0  |

Tough cake .....per ton 84 0 0 | QUICKSILVER o .....per lb. 3s. 9d.

WELSH BARS still continue in considerable demand at 47. 12s. 6d., both consumers and shippers being buyers.

SCOTCH PIGS are more enquired for, and a good deal of business has been done in

Glaxo at fully 6d. advance on last week's rates. There are buyers of mixed Nos., cash at 43s., but sellers demand 43s. 6d. for three months open—business has been done at 44s. A meeting of the Iron trade was held here on Wednesday, the 20th inst., regarding the "scrap" question, at which several resolutions were passed, entirely coinciding with the late meetings in Liverpool and Manchester.

**LEAD.**—The demand continues good.

**TIN.**—More business has been done this week, but prices are a little lower; about 2000 of Banca have been sold at 79s. Straits remain quiet at 79s. and 80s.

**ENGLISH BARS AND BLOCKS** are dull, but it is difficult to find refined at the present price.

**TIN PLATES.**—The supply continues short and the demand active.

**COPPER.**—Several second parcels having been taken off the market: nothing is to be

**LIVERPOOL, Nov. 22.**—Copper and metal still continue in good demand, and our makers' hands are full of orders. Our advices from Calcutta to 7th, and Bombay to 16th Oct., represent those markets to be very dull for all metals with lower quotations. In

GLASGOW, Nov. 21.—Pig-iron has attracted more attention this week, during which a considerable business has been transacted, at 2*l*. 3*s*. to 2*l*. 3*s*. 6*d*. cash, f.o.b. The sys-

men of makers' scrip seems to be universally condemned; various meetings of a preliminary nature have been attended by the Trade here, Liverpool, Manchester, and London, and to-morrow there is to be a general meeting on the subject in this city, with the view of giving more prominent expression to the opinion entertained of the practice now in vogue in the mode of settlement and delivery of transactions in pig-iron.

Nov. 23.—There is been a good business done in Scotch pig-iron during the week at advanced prices, and the market is now firm at 43s. and 43s. 6d. per ton, cash, for mixed Nos., good brands, free on board here. The prospect of a successful campaign against "scrap" causes more inquiry for iron, as there is little doubt that, if the makers are unable to issue more "scrap," the quantity of stock in the market will speedily be diminished one-half, as it is the general opinion that there is far more "scrap" than there is iron.

**COAL MARKET, LONDON.**  
PRICE OF COALS PER TON AT THE CLOSE OF THE MARKET.  
**MONDAY.**—Beebie's Hartley 12 9—Clavering's New Tanfield 13 3—Holywell 15 3—

Original Windsor's Pond 12 6—Ord's Main 14—South Peareth 12 6—Tanfield Moor 13  
—Tanfield Moor But's 13—Townley 14—West Wylam 13 6—Wall's—End Bewicke and  
Co. 14 9—Gosforth 14 3—Hutton 14—Original Gibson 14 6—Riddell 14—Bell 15—Bel-  
mont 14 9—Braddyll 15 6—Hetton 15 9—Russell's Hetton 15 6—Stewart's 15 9—Car-  
ac 14 6—Whitworth 13 6—Adelaide Tees 15—Cleveland Tees 14 6—Maclean's Tees 13 9

SEYDLITZ 12ES 13—TET 13 3—VERHUIS 12ES 14 6—COWPEN HARTLEY 14 3—DERWENT-  
water Hartley 14 3—Hartley 13 3—SIDNEY'S Hartley 14 3—Snapthorpe 14—Ships at  
Market, 92; sold, 48.

WEDNESDAY.—Bate's West Hartley 13 6—Carr's Hartley 14 3—Clivering's New  
Tandfield 13 6—North Percy Hartley 13 6—Old Tandfield 12—South Pearce 12 6—Tan-  
field Moor 13 6—Westerton Hartley, 14—West Wram, 14 6—Wollas, East Garsford 14 3.

Original Gibson 14 3-Bidell 14- Bell 15- Belmont 14 9- Hetton 15 9- Jonassohn 14 3-  
Lambton 15 6- Lumley 14 9- Russell's Hetton 15 6- Scarborough 14 9- Stewart's 15 9  
- Whitwell 14 3- Caradoc 14 9- Cassop 15- Hemelton 14 6- Kelloe 15- South Hartle-  
pool 14- Whitworth 13 6- Adelaide Tees 13- Cleveland Tees 14 3- Maclean's Tees 13 9  
- Tees 15 9- Birchgrove Gralgola 19- Cowpen Hartley 11 6- Londonderry Nnts 11 6-

Friday.—Carr's Hartley 15—Chester Main 14—East Adair's Main 12 6—Holywell 1 3—Jonassohn's Hartley 13—North Percy Hartley 14 3—Old Tanfield 12—Windsor's Pontop 12 9—South Peareth 12 6—Tanfield Moor Bute's 13—Westerton Hartley 12—Fest Wylam 13 6—Wylam 14 9—Wall's-End Acorn Close 14 6—Elm Park 14 3—Hut-

14—Northumbrian 14—Original Gibson 14—Riddell 14—Lambton Primrose 15—  
elmont 14 9—Hetton 15 9—Haswell 16—Jonasohh 14—Lambton 15 6—Lumley 14 6  
Richmond 15—Stewart's 15 9—Whitwell 14 3—Cassop 15—Heselden 14 6—Hough  
15 15—Kelloe 15—South Kelloe 15—West Hetton 14 3—Whitworth 13 3—Adelaide  
15—Vernon's Tees 14 6—West Cornforth 13 9—Birchgrove Graigola 19—Cowpen  
15 15—Crossfield Merthyr and Gadley's Stream 18 6—Dorchester Hartley 15—

**New Patents.**

**LIST OF PATENTS GRANTED DURING THE PAST WEEK.**

**T. Coats, of Ferguslie, Paisley, Renfrew, Scotland, thread manufacturer, for certain improvements in turning, cutting, and shaping wood and other materials.**

**J. Martin, of Liverpool, Lancaster, rice miller, for improvements in machinery and apparatus for cleansing and otherwise treating rice and certain other grains, seeds, and**

T. Allan, of St. Andrew's-square, Edinburgh, printer and publisher of the *Caledonian Mercury*, for certain improvements in electric telegraphs, and in the application of electric currents for deflecting magnets, and producing electro-magnets.

W. Laird, of Liverpool, Lancaster, merchant, and E. A. Cowper, of Handsworth, Warwick, engineer, for improvements in machinery for loading and discharging certain de-

J. Hosking, of Islington, Middlesex, engineer, for certain improvements in valves applicable to pumps, and also in apparatus to regulate the pressure and flow of water, air, and through pipes.

T. Dutton, of Windsor-Edge Iron-Works, Pendleton, near Manchester, Lancaster,

C. A. Kuriz, of Manchester. Lancaster, practical chemist, for improvements in dyeing.

A. V. Newton, of Chanry-lane, Middlesex, mechanical draughtsman, for an improved composition applicable to the coating of wood, metals, plaster, and other substances which are required to be preserved from decay, which composition may be also employed as a cement or paint.

J. Greenough, of the Strand, Middlesex, gentleman, for improvements in the construction of chairs, couches, and seats, parts of which improvements are also applicable to various purposes where springs for supporting heavy bodies and resisting sudden and violent pressure are required.

**DESIGNS FOR ARTICLES OF UTILITY REGISTERED.**  
 F. Grosjean, Regent-street, Der Fuszwärmer (a railway rug or wrapper.)  
 F. F. Griffiths, Birmingham, saucepan lid; also candlestick.

1. Poiret, Bucklebury, improved lithographic press, for printing circulars and other  
 2. Jenkins and Wolmershausen, Curzon-street, Mayfair, lady's riding habit.  
 3. Waddington and Son, Coleman-street, Etal bis-utile, or parafal and knitting case.  
 4. Jerningham, Portmouth, Commander in the Royal Navy, letter clin.

Martindale, and T. Ewman, Globe-road, Mile-end, poche-au-chapeau.  
J. M. Billing, Newhall-street, Birmingham, a lithographic perforating and registering  
chine.—T. Rutter, Harborne, nail.—*Mechanics' Magazine.*

**PROXIES MUST BE STAMPED.**—The affairs of the Kingsett and Bedford are, unfortunately, involved in difficulties, and which are fully detailed in another column. There is one question arising in the dispute, however, which of general interest—that of the necessity of proxies being on stamped paper.

though satisfied that such was the case, we were desirous to obtain the opinion of a competent legal authority, as a satisfaction to those interested; we, therefore, applied to Mr. Collier, the author of the *Law of Mines*, and append the answer with which we were favoured:—"I am of opinion that proxies, under the circumstances which you put to me, require a stamp. Statute 7 Vic. c. 21

chedule), imposed a duty of 2s. 6d. on "every letter, power of attorney, or other instrument, made for the sole purpose of nominating, and a proxy to vote any meeting of the proprietors, or shareholders, of any joint-stock company, whether company or society, whose stock or funds are divided into shares and transferable." This clearly includes stock-book mines; nor do I think the sale

ment makes any difference. Persons cannot evade the stamp duties by agreement, and I think 'any writing under his hand' must be taken to mean any writing as the law requires, and with the incidents which the law attaches to it."

ection, and of the benefit conferred in the town and neighbourhood through instrumentality.

PRICE OF COALS PER TON AT THE CLOSE OF THE MARKET.

**The Wheel Reeth accounts**, the accounts for Sept. and Oct. were presented, showing—Balance from last account, 578*s.* 6*s.* 10*d.*; ore sold (less costs), 4229*i.* 8*s.* 3*d.*. = 4507*i.* 15*s.* 6*d.*.—To costs and merchants' bills, 287*i.* 8*s.* 6*d.*.—By dividend of 20*p.* per share, 2560*i.*: leaving balance in favour of adventurers of 966*i.* 7*s.*

**The Wheel Reeth accounts** for July, August, and Sept., show—Balance in favour on the 20th August, 595*i.* 16*s.* 3*d.*; by sales of tin, 4158*i.* 5*s.* 5*d.*. 4754*i.* 1*s.* 8*d.*.—Labour cost, 2296*i.* 15*s.*; doctor and club, 31*i.* 16*s.*; balance of old account for stamping and carriage, 19*i.* 4*s.*; merchants' bills, 20*i.* 19*s.* 3*d.*=2968*i.* 14*s.* 3*d.*: leaving balance in favour of adventurers, 857*i.* 7*s.* 5*d.*.—A dividend of 10*p.* per share (1200*i.*) was declared, leaving balance to credit of adventurers, 557*i.* 7*s.* 5*d.*

**The Providence Mines accounts**, to 20th November, show—Balance to and July, 775*i.* 4*s.* 2*d.*; by sale of tin ore, 49 tons 10 cwt. 1 qr. 10 lbs., 2087*i.* 10*s.* 10*d.*; less cost of tin ore, 208*i.* 10*s.* 10*d.*: leaving balance

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LIST OF PATENTS GRANTED DURING THE PAST WEEK.

4s. 1d. Mr. V West having supplied the engine on his own account (in accordance with an agreement on the 8th August, 1849), it was taken by the adventurers as their property, and the amount paid; as to the crushing machine supplied by Mr. James Thomas [The report will be found among our Mining Correspondence.]

At the Wellington Mines meeting, the accounts showed—Balance, from last account, 27l. 6s. 5d.; sales of copper ore, 974l. 4s. 9d.; tin stuff, 1l. 19s. 5d. (less dues, 59l. 3s. 6d.)=1037l. 7s. 1d.—Mine cost for July, 22l. 17s. 6d.; August, 354l. 13s. 3d.; merchants' bills, 114l. 3s. 3d.=211l. 14s.: showing balance of profit, 271l. 13s. 1d.—By dividend of 5s. per share (256l.), leaving over to next account, 15l. 13s. 1d.—to which is to be added, sale of 220 tons of ore, Oct. 10, 1387l. 16s. [The report is inserted among our Mining Correspondence.]

The Consolidated Mines accounts, to the 20th November, show—Two months' ore money, &c., after dues, 6511l. 13s. 9d.—Deduct cost for Sept. 10 Oct., 6267l. 19s. 9d.—showing profit, 244l. 14s.: add balance from last account, 1893l. 3s.—leaves now in hand 2127l. 17s.

At the Copper Bottom meeting the accounts were presented, showing—Stock in debt, 798l. 15s. 5d.; labour cost from April to end of Sept., including carriage of materials, 956l. 13s. 4d.; merchants' bills, 405l. 2s. 10d.; wagon and club, 20l. 11s.; lords' dues (1-18th), 7l. 0s. 11d.=2188l. 3s. 6d.; By amount short credited in former calls, 110l.; July 10, call of 20s. per share, 1000l.; ores sold, Sept. 5, 95l. 17s.; ditto tin, 30l. 18s. 11d.: showing book now in debt, 951l. 7s. 7d.

The accounts presented at the North Whal Buller meeting showed a balance in favour of the adventurers of 1014l. 13s. 5d. The donation

F. Groujean, Regent-street, Der Fuazwärmer (a railway rug or wrapper.)  
T. E. Groujean, Birmingham, sängerisch: also candlestick.

agents states that ground is being opened in every favourable direction, and that from the great improvement visible in the lode and surrounding strata in the western levels, the most favourable results were anticipated from that part of the mine.

At the Great Rough Tor meeting, a favourable account of the operations was presented, and the report of Capt. Richards stated that several tons of good ore had been extracted from the 45 fm. level: the pitches

also producing good ore. By the statement of accounts there was balance against the mine of 1747. 10s. 8d.; to meet which, and further variations, a call of 27. per share was made.

The West Tolgus and Treloweth accounts to the 19th November, show balance due to purser, and February, 2507. 8s. 3d.; cost for eight months, and October, 12832. 14s. 6d. = 15344. 2s. 9d.—By call 14th March, 1831; ditto 13th June, 470f. = 940f.—leaves balance now due to purser, 21s. 2d. A call of 1l. per share was made. In future the mine will be called "West Tolgus," instead of West Tolgus and Treloweth. [The report will be found among our Mining Correspondence.]

At the South Plain Wood meeting, the accounts showed the mine cost August as 2577. 9s. 6d.; for September, 2577. 13s. 5d.: the result being balance in hand of 917. 17s. 10d. A call of 1l. per share was made, which expected will clear off some liabilities for surface works, and cover extraordinary costs for the ensuing two months. The workings present favorable appearances, from which it is expected that the mine will shortly be in a productive state.

At the Devon and Courtenay Consols meeting, the accounts showed the



## SILVER-LEAD ORE

| Mine.        | Tons (21-cwt.) | Price.   | Purchasers.            |
|--------------|----------------|----------|------------------------|
| Court Grange | 27             | £16 13 6 | Locke, Blackett, & Co. |

## LEAD ORES.

Sold at Aberystwyth, Nov. 16.

| Mine.                         | Tons. | Price per Ton. | Purchasers.            |
|-------------------------------|-------|----------------|------------------------|
| Foxdale                       | 100   | £12 1 6        | Walker, Parker, & Co.  |
| Sold at Aberystwyth, Nov. 16. |       |                |                        |
| Goginan                       | 40    | £15 18 0       | Walker, Parker, & Co.  |
| ditto                         | 40    | 11 4 0         | ditto                  |
| Frongoch                      | 40    | 11 5 6         | Sims, Williams, & Co.  |
| ditto                         | 40    | 11 5 6         | Pantlithy Smelting Co. |
| Cwmystwith                    | 40    | 11 3 0         | ditto                  |
| Nantnos                       | 40    | 10 10 0        | ditto                  |

## SOLD AT LAKELAND, NOV. 19.

|                |     |          |                |
|----------------|-----|----------|----------------|
| Wheal Trelawny | 100 | £20 13 6 | Thomas Somers. |
| ditto          | 30  | 2 6 6    | ditto          |

Sold at Douglas, Isle of Man, November 20.

|            |     |          |                       |
|------------|-----|----------|-----------------------|
| Newtonards | 100 | £11 1 0  | Walker, Parker, & Co. |
| Gartindyne | 38  | £10 13 0 | Newton, Keates, & Co. |

## BLACK TIN.

| Mine.           | Cwt. gr. lb. | Price per ton. | Purchasers.          |
|-----------------|--------------|----------------|----------------------|
| Georgia Consols | 17 3 14      | £22 0 0        | Boltho and Sons.     |
| Tincroft        | 13 0 0       | 42 0 0         | Daubus and Williams. |

## COPPER ORES.

Sampled October 30, and sold at Swansea, November 19, 1890.

| Mine.      | Tons. | Prod. | Price.  | Mine.         | Tons. | Prod. | Price.   |
|------------|-------|-------|---------|---------------|-------|-------|----------|
| Berehaven  | 101   | 10    | £7 4 0  | Knockmahon    | 71    | 81    | £6 6 0   |
| ditto      | 92    | 10    | 7 6 0   | ditto         | 68    | 84    | 6 6 0    |
| ditto      | 85    | 10    | 7 4 6   | ditto         | 29    | 8     | 6 0 0    |
| ditto      | 76    | 11    | 8 4 6   | Burra Burra   | 92    | 364   | £28 17 6 |
| ditto      | 75    | 11    | 8 7 0   | ditto         | 47    | 364   | 29 0 0   |
| Chill      | 69    | 20    | 15 10 0 | Kaw-aw        | 70    | 15    | 11 14 6  |
| ditto      | 67    | 21    | 16 6 0  | Sand          | 10    | 15    | 11 12 0  |
| ditto      | 66    | 22    | 16 10 6 | Spanish       | 73    | 84    | 5 16 6   |
| ditto      | 65    | 22    | 16 8 6  | ditto         | 1     | 194   | 14 10 0  |
| ditto      | 40    | 40    | 31 8 6  | Waterloo Slag | 67    | 3     | 2 1 0    |
| ditto      | 39    | 39    | 30 12 6 | Kapunda       | 31    | 55    | 45 12 6  |
| ditto      | 38    | 38    | 29 43 6 | Ballynec      | 28    | 9     | 6 18 6   |
| ditto      | 37    | 37    | 28 42 8 | Vine Slag     | 19    | 84    | 8 12 6   |
| Coburn     | 63    | 24    | 16 6 0  | Sand          | 10    | 15    | 11 12 0  |
| ditto      | 63    | 24    | 16 12 6 | Australian    | 4     | 234   | 17 15 0  |
| ditto      | 61    | 16    | 12 7 6  | ditto         | 3     | 218   | 16 16 0  |
| ditto      | 59    | 23    | 17 15 6 | ditto         | 1     | 20    | 15 15 0  |
| ditto      | 48    | 17    | 13 11 0 | London Slag   | 4     | 5     | 3 15 0   |
| ditto      | 47    | 15    | 12 11 6 | Ballymurtagh  | 3     | 35    | 26 0 0   |
| ditto      | 34    | 17    | 12 19 0 | Sydney        | 2     | 23    | 18 7 0   |
| ditto      | 32    | 24    | 10 10 0 | Cronbane      | 3     | 374   | 28 1 0   |
| Knockmahon | 80    | 81    | 6 11 6  | Tigrony       | 3     | 374   | 28 5 0   |

## TOTAL PRODUCE.

|               |     |           |              |    |          |
|---------------|-----|-----------|--------------|----|----------|
| Berehaven     | 499 | £2954 5 6 | Ballynec     | 25 | £173 2 6 |
| Chill         | 421 | 9970 13 6 | Vine Slag    | 19 | 68 17 6  |
| Coburn        | 407 | 6119 7 6  | Sand         | 10 | 27 10 0  |
| Knockmahon    | 245 | 1586 15 6 | Australian   | 8  | 137 3 0  |
| Burra Burra   | 139 | 4019 10 0 | London Slag  | 4  | 15 10 0  |
| Kaw-aw        | 126 | 1470 0 0  | Ballymurtagh | 3  | 78 0 0   |
| Waterloo Slag | 67  | 430 14 6  | Sydney       | 2  | 36 14 0  |
| Kapunda       | 31  | 137 7 6   | Cronbane     | 3  | 84 3 0   |
|               | 61  | 1414 7 6  | Tigrony      | 3  | 84 15 0  |

## COMPANIES BY WHOM THE ORES WERE PURCHASED.

| Company.                  | Tons. | Amount.     |
|---------------------------|-------|-------------|
| English Copper Company    | 4421  | £2647 19 6  |
| Freeman and Co.           | 1124  | 730 15 0    |
| Grenfell and Sons         | 224   | 2795 3 3    |
| Sims, Williams, and Co.   | 185   | 2564 14 0   |
| Vivian and Sons           | 3924  | 5091 19 3   |
| Williams, Foster, and Co. | 495   | 5629 12 6   |
| Mines Royal               | 38    | 1634 19 0   |
| Schneider and Co.         | 105   | 1926 16 6   |
| Mason and Elkington       | 105   | 3008 7 6    |
| Total                     | 2016  | £29,097 6 6 |

Copper Ores for Sale Dec. 3.—Cuba 90, ditto 75, ditto 74, ditto 72, ditto 71, ditto 51, ditto 30—Copolato 78, ditto 77, ditto 76, ditto 75, ditto 74, ditto 73—Coburn 101, ditto 80, ditto 58, ditto 13—Sydney 53—Waterloo Slag 20.—Total, 1224 tons (21-cwt.).

## AVERAGES.

| Produce.   | Price.  | Standard. |
|--|---------|-----------|
| British  | £6 15 6 | £36 19 6  |
| Foreign  | 19 10 6 | 85 1 0    |
| Sale   | 18 1/2  | £14 8 6   |
| Totals—British 908; Foreign, 1908=2016 tons (21-cwt.). |         | £38 4 0   |

## AVERAGES OF LAST SALE.

| Produce.  | Price. | Standard. |
|---|--------|-----------|
| British   | £6 0 0 | £102 0 6  |
| Foreign   | 17 1/2 | 87 13 0   |
| Sale  | 16 1/2 | £12 4 0   |
| Totals—British, 263; Foreign, 1402=1665 tons (21 cwt.). |        | £58 6 6   |

## COPPER ORES

Sampled Nov. 6, and sold at the Royal Hotel, Truro, Nov. 21.

| Mine.           | Tons. | Price.  | Mine.          | Tons. | Price. |
|-----------------|-------|---------|----------------|-------|--------|
| Devon Gt. Cons. | 119   | £5 18 6 | West Caradon   | 61    | £5 9 0 |
| Wh. Josiah      | 114   | 6 2 6   | ditto          | 53    | 10 1 6 |
| ditto           | 114   | 6 3 6   | Fowey Consols  | 93    | 5 6 6  |
| ditto           | 110   | 6 11 6  | Wh. Friendship | 102   | 7 10 0 |
| ditto           | 108   | 6 13 6  | Wh. Friendship | 102   | 7 10 0 |
| ditto           | 93    | 6 10 6  | Wh. Friendship | 102   | 7 10 0 |
| ditto           | 90    | 7 2 0   | Wh. Friendship | 102   | 7 10 0 |
| ditto           | 68    | 6 2 6   | Wh. Friendship | 102   | 7 10 0 |
| Wh. Fanny       | 98    | 6 3 6   | Wh. Friendship | 102   | 7 10 0 |
| ditto           | 84    | 5 14 0  | Wh. Friendship | 102   | 7 10 0 |
| ditto           | 70    | 6 6 6   | Wh. Friendship | 102   | 7 10 0 |
| ditto           | 62    | 7 7 6   | Wh. Friendship | 102   | 7 10 0 |
| Wh. Maria       | 74    | 5 1 0   | Wh. Friendship | 102   | 7 10 0 |
| ditto           | 49    | 9 12 0  | Wh. Friendship | 102   | 7 10 0 |
| Wh. Anna Maria  | 92    | 5 11 0  | Wh. Friendship | 102   | 7 10 0 |
| ditto           | 66    | 5 14 6  | Wh. Friendship | 102   | 7 10 0 |
| ditto           | 29    | 7 0 6   | Wh. Friendship | 102   | 7 10 0 |
| West Caradon    | 93    | 6 13 0  | Wh. Friendship | 102   | 7 10 0 |
| ditto           | 88    | 6 13 6  | Wh. Friendship | 102   | 7 10 0 |

## TOTAL PRODUCE.

|                 |      |             |                   |     |           |
|-----------------|------|-------------|-------------------|-----|-----------|
| Devon Gt. Cons. | 119  | £5 18 6     | Bedford United    | 120 | £2702 0 0 |
| Wh. Josiah      | 114  | 6 2 6       | Pendarras Consols | 64  | 289 16 6  |
| Wh. Maria       | 1528 | £10146 12 6 | Wh. Maiden        | 35  | 148 10 6  |
| Wh. Fanny       | 98   | 6 3 6       | Helgaston Downs   | 25  | 235 0 0   |
| Wh. Anna Maria  | 92   | 5 11 0      | Wh. Maiden        | 35  | 148 10 6  |
| Wh. Friendship  | 186  | 1443 6 0    | Wh. Maiden        | 35  | 148 10 6  |
| Poldice         | 146  | 748 18 0    | Wh. Maiden        | 35  | 148 10 6  |

Average Standard ..... £ 95 3 0 | Average Produce ..... 94  
Average Price per ton ..... £ 6 8 0  
Quantity of Ore ..... 2766 tons | Quantity of Fine Copper, 263 tons 13 cwt.  
Amount of Money ..... £17,752 14 6  
LAST SALE.—Average Standard ..... £17,752 14 6  
Standard of corresponding sale last month, 967. 35.—Produce, 94.

## COMPANIES BY WHOM THE ORES WERE PURCHASED.

| Mine.                     | Tons. | Amount.      |
|---------------------------|-------|--------------|
| Mines Royal               | 124   | £751 8 0     |
| Vivian and Sons           | 411   | 2088 14 9    |
| Freeman and Co.           | 429   | 2729 4 6     |
| Grenfell and Sons         | 344   | 1917 17 0    |
| Crown Company             | 40    | 234 0 0      |
| Sims, Williams, and Co.   | 450   | 2684 3 10    |
| Williams, Foster, and Co. | 743   | 5288 5 0     |
| Schneider and Co.         | 219   | 1125 0 0     |
| Total tons                | 2766  | £17,752 14 6 |

Copper ores for sale on Thursday next, at the Royal Hotel, Truro.—Mines and Parcels.—Consols 700—United Mines 527—Perran St. George 456—Trevikey 425—Par Consols 293—South Caradon 253—South Trelawny 224—Trehellan 193—Trelough Consols 125—Comfort 110—Wheal Mary 107—Wheal Ellen 82—Wheal Henry 66—Cartlow Consols 41—Bespinn 10—Wheal Clifford 9—Wheal Penhale 7.—Total, 3547 tons.

Copper ores for sale, on Thursday week, at Andrew's Hotel, Redruth.—Mines and Parcels.—Tincroft 722—North Pool 596—East Wheal Croft 565—Wheal Basset 550—Wheal Seton 543—Camborne Vein 368—East Pool 315—Fowey Consols 275—Condurow 272—South Wheal Frances 263—Dolcoath 193—North Roskear 164—Wheal Elizabeth 41.—Total quantity of ore to be sold, 4835 tons.

## CURRENT PRICE OF GOLD AND SILVER.

|                       |                 |                           |                    |
|-----------------------|-----------------|---------------------------|--------------------|
| Foreign gold, in bars | per oz. £3 17 9 | New dollars               | per oz. £2 4 1 1/2 |
| Portugal pieces       | 0 0 0           | Silver in bars (standard) | 0 3 1 1/2          |

## PRICES OF MINING SHARES.

\* \* As it is exceedingly difficult to obtain a correct knowledge of all the mines in our list in London, we trust the agents, and others interested, will assist us, by forwarding any corrections with which they may be acquainted—our object being to present as perfect a list as can be procured.

## BRITISH MINES.

| Share. | Company.   | Paid.   | Price.    |
|--------|--|---------|-----------|
| 1000   | Aberystwyth (silver-lead), South Wales                     | 9       | —         |
| 5130   | Alfred Consols (copper), Hayle, Cornwall                   | 24      | 10 20     |
| 1348   | Alit-y-Crib (silver-lead), Talybont, Cardiganshire         | 5       | —         |
| 1024   | Balnewidien (tin), St. Just, Cornwall                      | 5       | 10 10 1/2 |
| 128    | Balmuccia Consols (tin), Uny Lelant, Cornwall              | 48      | 50        |
| 908    | Barristown (lead), Carrick, Ireland                        | 5 1/2   | —         |
| 3650   | Bawden (silver-lead), Cornwall                             | 7 1/2   | 8 1/2     |
| 4000   | Bedford United (copper), Tavistock, Devon                  | 23      | 52 5 1/2  |
| 1280   | Birch Tor and Vitrill (tin), Dartmoor, Devon               | 10 1/2  | 4         |
| 1500   | Bishopstone (silver-lead), Glamorganshire                  | 1 1/2   | 10        |
| 8000   | Black Craig (lead), Kirkcubrightshire                      | 5       | 5 1/2     |
| 10000  | Blacknaveon (iron), South Wales                            | 60      | 12 1/2    |
| 1024   | Bodmin Consols (lead), Wadbridge, Cornwall                 | 3       | 3         |
| 1000   | Bodmin Moor Consols (tin and copper), Bodmin, Cornwall     | 1       | 3 1/2     |
| 40     | Bolowal and Nanpan (tin), St. Just, Cornwall               | —       | 16        |
| 128    | Boscon (tin), St. Just, Cornwall                           | 10      | 10        |
| 60     | Boscon (tin), St. Just, Cornwall                           | 4 1/2   | 6         |
| 100    | Botallack (tin and copper), St. Just, Cornwall             | 182     | 200       |
| 1500   | Briford Wheel Augusta (lead), Briford, Devon               | 12      | 8         |
| 19000  | British Iron, New, regis. (iron), South Wales              | 12      | 8         |
| —      | Ditto ditto, scrip   | 10      | 10        |
| 2400   | Bryn Arian (lead), Cardiganshire                           | 2       | 2 1/2     |
| 107    | Budnick Consols (tin), Penryn, Cornwall                    | 52 1/2  | 10 11 1/2 |
| 406    | Butterton (lead), Menheniot, Cornwall                      | 1 1/2   | 8         |
| 2000   | Bute Consols (silver-lead), Cardiganshire                  | 4       | 4 1/2     |
| 1000   | Callington (lead and copper), Callington, Cornwall         | 26      | 6 1/2     |
| 1000   | Camborne Consols (copper), Camborne, Cornwall              | 7       | 7 1/2     |
| 20000  | Camborne's Steam Coal (coal), Swansea, Wales               | 7       | —         |
| 1168   | Caradon Great Cons. Mines (copper), Linkinhorne, Corn.     | 7       | 3         |
| 1325   | Caradon Vale (copper and lead), St. Ives, Cornwall         | 14      | 14 1/2    |
| 1000   | Carbana (tin and copper), Crowan, near Camborne            | 5       | 10        |
| 1000   | Carn Brea (copper and tin), Illogan, Cornwall              | 15      | 11 1/2    |
| 3000   | Cartlow Consols (copper and lead), near Wadswick, Cornwall | 4       | 7 1/2     |
| 132    | Carvannal (copper), Gwennap, Cornwall                      | 21 1/2  | 60 80     |
| 100    | Cefn Branno (lead), Cardiganshire                          | 6       | 40        |
| 113    | Charlestown (tin and copper), St. Austell, Cornwall        | 220     | —         |
| 500    | Comblawn (lead), Callington, Cornwall                      | 6 1/2   | 4 1/2     |
| 128    | Comfort (copper), Gwennap, Cornwall                        | 45      | 95        |
| 256    | Condurow (copper and tin), Camborne, Cornwall              | 20      | 115       |
| 3560   | Cook's Kitchen (copper and tin), Illogan, Cornwall         | 14      | 10 12     |
| 1000   | Coombe Valley Quarry (salate), St. Glunias, Cornwall       | 5       | 2         |
| 1000   | Copper Bottom (copper), Crowan, Cornwall                   | 5       | 7         |
| 1000   | Court Grange (silver-lead), Cardiganshire                  | 10      | 12        |
| 910    | Craddock Moor (copper), St. Cleer, Cornwall                | 28      | 7 1/2     |
| 1600   | Craig-y-Mwyn (lead), Llanrhaeadr, Montgomeryshire          | 4       | 8         |
| 236    | Cranes and Belajava (copper), Camborne                     | 2       | 2         |
| 1000   | Cwm Erfin (lead), Cardiganshire                            | 4       | 4 1/2     |
| 128    | Cwmystwith (lead), Cardiganshire                           | 60      | 90        |
| 1000   | Daren (silver-lead), Cardiganshire                         | 2       | 7 1/2     |
| 7100   | Derwent (silver-lead), Durham                              | 10      | 3         |
| 1024   | Devon and Cornish Consols (copper), near Tavistock         | 6       | 1 1/2     |
| 1024   | Devon Great Consols (copper), near Tavistock               | 1       | 230 235   |
| 1000   | Diurood (copper), Ireland                                  | 2       | 5         |
| 180    | Dolcoath (copper and tin), Camborne                        | 252     | 18 20     |
| 2560   | Drake Walls (tin and copper), Calstock, Cornwall           | 6 1/2   | 24 3      |
| 10000  | Durham County Coal (coal), Durham                          | 45      | 9         |
| 3000   | Dyffryn (lead), North Wales                                | 10      | 1         |
| 1024   | East Baleswidden (tin), Sancerre, Cornwall                 | 2       | 2         |
| 2500   | East Birch Tor (tin), North Bovey, near Ashburton          | 3       | 3         |
| 1024   | East Buller (copper), near Redruth, Cornwall               | 2       | 6 1/2     |
| 128    | East Carn Brea (copper), Redruth, Cornwall                 | 1       | 3         |
| 2048   | East Crowndale (tin), Tavistock                            | 7 1/2   | 14        |
| 140    | East Daren (lead), Cardiganshire                           | 14      | 51 52 1/2 |
| 256    | East Dolphin (copper), Crowan, Cornwall                    | 13 1/2  | 13        |
| 4000   | East Gannal Lake Junction (copper), Gannal Lake            | 4       | 5 1/2     |
| 1024   | East Polgoth (tin), Cornwall                               | 6       | 7 1/2     |
| 128    | East Pool (tin and copper), Pool, Illogan, Cornwall        | 24 1/2  | 80 90     |
| 256    | East Soton and Wheal Maude, near Redruth, Cornwall         | —       | 8         |
| 1024   | East Sharp Tor (copper), Cornwall                          | —       | 8         |
| 9000   | East Tamar Consols (silver-lead), Beer Ferris, Devon       | 1 1/2   | 18 1 1/2  |
| 256    | East Tolgus (copper), Redruth, Cornwall                    | 14      | 12        |
| 1000   | East Treowal (tin), Lanivet, near Bodmin, Cornwall         | 1       | 2 1/2     |
| 128    | East Tywarthayle (copper), St. Agnes, Cornwall             | 1       | 7         |
| 94     | East Wheal Croft (copper), Illogan, Cornwall               | 125     | 110 120   |
| 256    | East Wheal Frances, Illogan                                | 14      | 34        |
| 1000   | East Wheal Reeth   | 1       | —         |
| 512    | East Wheal Leisure (copper), Penryn, Cornwall              | 2       | 6 1/2     |
| 128    | East Wheal Rose (silver-lead), Newlyn, Cornwall            | 50      | 525 550   |
| 1280   | Eggar Lio (lead), Llanrhaeadr-y-Croghen, Cardiganshire     | 2       | 3 1/2     |
| 248    | Exmoor Wheal Eliza (copper), South Molton, Devon           | 11      | 10        |
| 494    | Fowey Consols (copper), Tywardreath, Cornwall              | 40      | 30        |
| 1024   | Freidil Llywdd Mines (lead), Wales                         | 14      | 3 1/2     |
| 256    | Garras (lead), near Truro                                  | 4       | 2 1/2     |
| 4000   | General Mining Company for Ireland (copper), Ireland       | 1 1/2   | 4         |
| 100    | Goginan (lead), Cardiganshire                              | 5       | 250       |
| 256    | Goumuna (copper), St. Cleer, Cornwall                      | 46      | 15        |
| 2500   | Georgia Consols (tin), St. Ives, Cornwall                  | 2 1/2   | 4 1/2     |
| 256    | Graham and St. Aubyn (copper), Redruth, Cornwall           | 80      | 28 30     |
| 2000   | Great Beam (tin)   | 5       | 62 7 1/2  |
| 96     | Great Consols (copper), Gwennap, Cornwall                  | 1000    | 250       |
| 512    | Great Wheal Badden (tin and silver-lead), Kea, Cornwall    | 20      | 100       |
| 1024   | Great Sheba Consols (tin and copper), Stoke Climsland      | 2       | 4 1/2     |
| 3072   | Great Wheal Mitchell Consolidated, Lanivet                 | —       | 5         |
| 512    | Gr. Wh. Rough Tor Consols (copper), near Camelford         | 29      | 20        |
| 6000   | Growa Slate Company, Camelford, Cornwall                   | 5       | 5         |
| 1024   | Gustavas Mines (copper), Camborne                          | 3       | 4 1/2     |
| 512    | Hawke's Point (copper), Uny Lelant, Cornwall               | 5 1/2   | 7 1/2     |
| 1024   | Hawkmoor (copper), Calstock, Gunnis Lake                   | 5       | 17        |
| 6000   | Heligston Down Consols (copper), Calstock, Cornwall        | 2 1/2   | 3 1/2     |
| 1500   | Hennock (silver-lead), Hennock, near Exeter, Devon         | 2       | 3 1/2     |
| 1000   | Hervodale (lead), near Liskeard                            | 16      | 12 1/4    |
| 1000   | Hibernian (copper), Ireland                                | 12 1/2  | 12        |
| 1000   | Holmbush (lead and copper), Callington                     | 20      | 20 21     |
| 1900   | Keswick (lead), Portmeane, near Keswick                    | 11      | 2 3       |
| 1024   | Kingsett & Bedford (lead & copper), St. Mary Tavy, Devon   | 32      | 3         |
| 787    | Kirkcubrightshire (lead), Kirkcubrightshire, Scotland      | 8 1/2   | 52 5 1/2  |
| 2018   | Lanherose Wheal Maria (copper and tin), Lamerton           | 11      | 7 1/2     |
| 812    | Lanherose Consols (copper), Gwennap, Cornwall              | —       | 84 9      |
| 1280   | Lanivet (copper and tin), Uny Lelant, Cornwall             | 53      | 25        |
| 250    | Lavan (copper and tin), St. Just, Cornwall                 | 17      | 17 1/2    |
| 100    | Lewis (tin and copper), St. Erth, Cornwall                 | 17      | 18        |
| 100    | Lisburne (lead), Cardiganshire                             | 75      | 600       |
| 1000   | Livynmooles (lead), Cardiganshire                          | 9 1/2   | 9 10      |
| 3500   | Llynri Iron (iron), North Wales                            | 50      | 50        |
| 1000   | Marke Valley (copper), Cardoran, Cornwall                  | 10      | 4 1       |
| 1000   | Mendils Hills (lead), near Bristol                         | 34      | 14 1 1/2  |
| 256    | Methen (copper), Cornwall                                  | 1       | 1         |
| 256    | Mill Pool (tin and copper), St. Hilary and Germoe, Corn.   | 14      | 10        |
| 256    | Mineral Court (tin), St. Stephens, near St. Austell        | 13 1/2  | 49        |
| 1000   | Mining Co. of Ireland (copper, &c.), Waterford, Ireland    | 7       | 5 1/2     |
| 1024   | Modithonam & Marrabro' (copper & lead), Botes-fleming      | 1 1/2   | 24 23     |
| 1024   | Montgomery (lead and copper), Montgomeryshire              | 6       | 114 12    |
| 320    | Nansogollan (tin and copper), Camborne                     | 1       | 2         |
| 300    | Nanteos (lead), Cardiganshire                              | 34      | 25        |
| 1000   | Nant-y-Bear (copper), near Rhydyarth                       | 1       | 5 1/2     |
| 934    | New East Crowndale (copper and tin), Tavistock             | 2       | —         |
| 1000   | North Wheal Bassett (copper and tin), Illogan, Cornwall    | —       | 12 15     |
| 1024   | North Buller (copper), Redruth, Cornwall                   | 3       | 62 7      |
| 1000   | North Wh. Buller, or Gt. South Tolgus (copper), Redruth    | 5       | 7         |
| 1000   | North Levant (tin and copper), St. Just, Cornwall          | —       | 3         |
| 1000   | North Pool (copper and tin), Pool, Cornwall                | 45      | 400       |
| 140    | North Talcott (copper), Camborne, Cornwall                 | 52      | 160       |
| 1000   | North Tolgus (copper), Redruth, Cornwall                   | 21      | 84        |
| 1000   | North Wheal Leisure, Penryn, Cornwall                      | 3       | 1 1/2     |
| 512    | North Wheal Vro (tin), Breage, near Helston, Cornwall      | —       | 5         |
| 128    | Par Consols (copper), St. Blazey, Cornwall                 | 55 1/2  | 650       |
| 1026   | Pendarvas Consols (copper), Camborne, Cornwall             | 2       | 6 1/2     |
| 1000   | Pendarvas and St. Aubyn (copper), Camborne, Cornwall       | 5       | 12        |
| 934    | Pennant and Criguen (lead), Wales                          | 3       | 3         |
| 1024   | Penfide (copper and tin), (copper lead), Minver, Cornwall  | 6       | 9         |
| 1000   | Penryn and Bank End Engold (lead), Caradon, Cornwall       | 1       | 1         |
| 1024   | Porran St. George (copper and tin), Penryn, Cornwall       | 21 1/2  | 20        |
| 1024   | Penzance Consols (tin), Sancerre, Cornwall                 | 324 3/4 | 1 1 1/2   |
| 1000   | Peter Tavy and Mary Tavy (copper), Tavistock, Devon        | 21      | 52 6      |
| 1012   | Plymouth Wheal Yeohad (tin), Plymouth, Devonshire          | 6 1/2   | 6         |
| 1000   | Port Prefrental  | 15      | —         |
| 1000   | Polterron (tin), St. Agnes, Cornwall                       | 1       | —         |
| 350    | Providence Mine, Uny Lelant, Cornwall                      | 30      | 30        |
| 1000   | Rhoswilly and Bachelidon (lead)                            | 10      | 10        |
| 1000   | Rhytniey Iron (iron), Rhytniey, South Wales                | 50      | 12        |
| 1000   | Ditto New  | 7       | 3         |
| 1000   | Roche Rock (tin), Roche, near St. Austell                  | 1       | 1         |
| 1000   | Rocks Mine (tin), Roche, near St. Austell                  | 5       | 6 1/2     |
| 1000   | Rumford Coombe (tin), Devon                                | 24      | 31 4      |
| 1000   | Snowdon (copper), Carnarvonshire, Wales                    | 3       | —         |
| 28     | South Wheal Leisure, Penryn, Cornwall                      | —       | 230 260   |
| 1000   | South Carn Brea (copper), Illogan, Cornwall                | 10      | 10        |
| 1000   | South Dolcoath (copper), Illogan, Cornwall                 | 6       | 3 4       |
| 1000   | South Friendship Wheal Ann (copper & tin), Devonshire      | 30      | 28 30     |
| 1000   | South Molton (lead), Devonshire                            | 12 1/2  | 12 1/2    |
| 1000   | South Plaina Wood (copper), Ashburton, Devon               | 24      | 67        |
| 1000   | South Speed (copper and tin), Uny Lelant, Cornwall         | 15      | 30        |
| 1000   | South Tamar (silver-lead), Beer Ferris, Devon              | 1       | 24 1/2    |
| 1000   | South Tamar (copper and tin), Beer Ferris, Devon           | 16      | 160 165   |
| 1000   | South Treowal (lead), near Liskeard, Cornwall              | 31      | 3 3 1/2   |
| 1000   | South Wales Mining Company (lead), South Wales             | 1       | 1         |
| 1000   | South Wheal Bassett (copper), Illogan, Cornwall            | 10 1/2  | 315       |
| 1000   | South Wheal Frances (copper), Illogan, Cornwall            | 75 1/2  | 600 620   |
| 1000   | South Wheal Josiah (copper), Calstock, Cornwall            | 2       | 31 4      |
| 1000   | Spearne Moor (copper), St. Just, Cornwall                  | 30      | 40        |
| 1000   | Spearne Consols (tin), St. Just, Cornwall                  | 10      | 64        |
| 1000   | St. Aubyn and Grylls (copper and tin), Breage, Corn.       | 24      | 18 20     |







coal in many localities (one often felt oppressively also by the parties engaged in colliery speculations), and that the workings for coal must be adjusted to local conditions, we are led to consider that these evils might at least be mitigated by the careful and judicious inspection of convenient districts by competent persons—the necessary funds to be raised from such districts by a very slight impost, not even exceeding 1d. on each ton raised in it; and we believe that the cause of humanity and the interests of the coalowners would be alike benefited by a well-considered legislative measure of this kind."

In this last remark we cordially agree. For years previous we had advocated the same principles; and the verdicts of coroners' juries have, from time to time, corroborated this opinion. It is a matter deeply to be regretted that no regular record has been kept of the accidents occurring in mines. From the various sources of information that we have been able to collect—but which, we lament to say, give but one-sixth, or a tithe, of the lives lost—we find that, in 1847, the number of accidents was 488; deaths, 623; injuries, 196: making a total of deaths and injuries of 819. In 1848, accidents, 403; deaths, 567; injuries, 239: total of deaths and injuries, 806. In 1849, accidents, 406; deaths, 567; injuries, 341: total, 908—thus giving in three years the fearful amount of 1397 accidents, 1757 deaths, and 976 injuries: total of deaths and injuries, 2733. This, we regret to add, is by no means a correct account of all that have occurred, though we believe it to be as accurate an approximation as can be gathered under the present imperfect system. Several cases have happened, of the details of which, or the number of persons killed and injured, we have been unable to obtain any information.

In referring to the above figures, it can be easily imagined the amount of mourning, calamity, and pauperism which has been entailed in these districts by the untimely loss of such a number of the productive population, in many instances having wives and families dependent on them. Since the commencement of the present year, up to the present time, there have been—Accidents, 387; deaths, 478; injuries, 172. The deaths have been, caused by explosions, 202; falls of roof, or coal, 120; fall in pit, 74; machinery, 23; accidents not specified, 60: total of deaths, 478. Injuries by explosions, 100; falls of roof, or coal, 25; fall in pit, 10; machinery, 17; accidents not specified, 20: total of injuries, 172. Injuries and deaths, 650. Of this number, since the passing of the Act, there have been—Accidents, 150; deaths, 180; injuries, 114; so that it will be seen that the proportion has by no means decreased since the new enactment has been supposed to be in activity.

In many of these—and we refer especially to the Airdrie and the Singing Clough, which have occurred since—it appears that the sole blame rests on the workpeople; while the agents cannot be blameless, having allowed the collier to have a control over the safety-lamp, which thus becomes comparatively nugatory. There can be no doubt that candles are more convenient and give a better light than lamps; but in every case where danger is to be apprehended the use of the former should be forbidden in any part of the mine. It may be difficult to avoid collusion among a number of labourers, but when a discovery took place, if a summary punishment was immediately carried into effect, and one or two severe examples made, the evil would soon be remedied. Regulations should be placed in every counting-house, the disobedience of which should subject the party offending to instant dismissal. A strict inspection should be enforced, and the provisions of the bill carried out immediately: we cannot afford the delay when we see the fatal results to which procrastination leads. The miners, we are told, are about to memorialise the Home Secretary; his duty should long ago have been to take some steps to mitigate these calamities, by appointing sub-inspectors, and using the powers vested in him by Parliament. If he further dillies, we fearlessly say that he incurs an enormous amount of responsibility, almost amounting to criminality. At the same time we admit the development of the Act is beset with great difficulties, while these are not so many but that a man of ordinary energy and common sense, in his position, would long since have obviated in some measure—though not to the extent which could be desired by all those interested in mines and collieries.

By a notification which appears in another column, since the foregoing was written, it will be seen that the Government have at last taken the necessary steps, by nominating "Inspectors of Coal Mines in Great Britain." The proceedings of the Government so far have our hearty concurrence: the four gentlemen named, in addition to their scientific qualifications, being possessed of the requisite practical knowledge to perform efficiently the arduous and difficult duties intrusted to them—the three first, indeed, are well known to our readers, from the numerous and able contributions with which they have frequently enriched our columns. This important question having now assumed a tangible form, we shall recur to the subject in our next, when we shall point out what we consider should be some of the leading principles which should actuate the inspectors in the performance of their duties; and, we trust, by their exertions, the calamities hitherto occurring will be, in some measure, mitigated.

The *Morning Herald* of Friday assigns a reason for the speedy establishment of a "Mining Exchange," which is not very flattering to the mining interest. It says, in effect, that the opinion generally entertained of their conduct in their peculiar vocation as mining agents is such, that an Exchange is absolutely essential to give the public the assurance of being honourably dealt with. If this assumption respecting the character of the parties engaged in such business is correct, it is rather curious that those who are most active in promoting this object should be the very mining brokers whose honour is thus unceremoniously, albeit rather obliquely, impugned. It is well known that the leading members of the mining community are the real originators of the project, which has, moreover, been supported from a general desire on their part to afford every guarantee to the public that an open market can afford. This is exactly the conduct which honourable men might be expected to pursue, and which it is tolerably certain that those who deserved the stigma thrown upon them by the *Herald* would not adopt. The error lies in applying to the general mining body what at most can be applicable but to a few, as if any miscellaneous class were not open to just the kind of imputations speedily thrown out. According to the *Herald*, however, the committee of the Stock Exchange are so impressed with the fact in question—to wit, the questionable character, we suppose, of mining brokers and agents—that they are losing no time in making arrangements to carry into effect the plan of a regular market and authorised quotations, with a view, of course, to the protection of the public, under the shadow of their own purity. Whatever their plans may be, they appear rather slow of development; for it is now some time since we first heard of the intentions of the Stock Exchange in this matter. Whatever the issue, nevertheless it is not likely to be quite the easy affair it seems to be imagined by the *Herald*. The mining interest have formed their plans as well as the Stock Exchange; and except with their co-operation, the proposed market in Capel-court is not likely to be very smoothly carried out. The committee may open their market; but can they command the transaction of mining business when they have done so? Business may have been transacted, as the *Herald* observes, in a very satisfactory manner under the present system; but it would scarcely mend the matter to hand it over as a monopoly to the "middlemen" of the Stock Exchange. The result will ultimately depend on the conditions on which such business is to be transferred; and if these they are not satisfactory, it will be still left to the mining interest, since it is agreed on all hands that an "Exchange" must be formed, to give effect to their views, in such a manner as their convenience and judgment shall dictate.

We regret that there are so many demands on our columns this week, that we are unable at present to give even an abstract of Mr. J. H. MURCHISON's admirable address at the Society of Arts on Wednesday evening. Mr. MURCHISON not only spoke eloquently, but most forcibly, and with great perspicuity; and his interesting account of the rise and progress of scientific societies in general, as well as his very detailed review of the proceedings and transactions of that society of which he is so prominent a member, and which was the chief subject of his address, must be productive of the most important and valuable results to it particularly. We hope, on an early occasion, to be enabled to publish, at least, an abstract of his speech, and will now only conclude with Mr. MURCHISON—"That this free and independent society, instituted for the public good, may long continue to do honour to its patrons, and that its present excellent plan, and all possible improvements, may be handed down to posterity, and by them be sacredly revered, and firmly upheld, with the rest of those inestimable privileges which have rendered us superior to the other nations of the

earth;" to which I may add," said the learned gentleman, "I sincerely hope it may long continue an effectual means to embolden enterprise, to enlarge science, to refine art, to improve manufacture, and to extend commerce—in a word, to render Great Britain the school of instruction, as it is already the centre of commerce, to all parts of the known world; indeed, I do not hesitate to believe that future ages will consider the present period of this society's career one of the most important epochs in the history of the arts."

#### PATENT LAW REFORM.

The question of reforming the law relating to patent for inventions, which has occupied so many of our columns for several years past, has at last been brought under the notice of her Majesty's Government, who received a deputation of the members of the Inventors' Patent Law Reform League some days since; and further communications from that association have been sent in at their request.

The first object of the league is to get such a modification of the present system effected, at the very commencement of the forthcoming session of Parliament, as shall meet the requirements of the Great Exhibition; and, to accomplish this, they propose—1. Provisional or preliminary protection of inventions, at little or no cost; this they consider might be effected by the provisional registration of Designs' Act of last session being extended to inventions.—2. The immediate reduction of the cost of letters patent to such an extent as may be now in the power of Government. Thus, of the 95*l.* payable for an English patent, 60*l.* is entirely at the disposal of the Chancellor of the Exchequer; of the 64*l.* for the Scotch, 20*l.*; and of the 120*l.* for Ireland, about 50*l.* It is evident, therefore, that it is the fault of the Government (as there is no question of compensation involving arrangements for silencing vested interests in this), if the cost of a patent for England be not immediately reduced to 35*l.*, Scotland to 45*l.*, and Ireland as low as practicable.

In suggesting this, the league are particularly anxious not to be misunderstood. They insist that the price of patents must be reduced much lower than this, as soon as a thorough revision of the law can be effected; and they shall not consider their mission fulfilled till this is effected.

A point which they particularly request the Government to bear in mind, is the necessity of making some arrangement by which the security of patent property may be maintained with cheapness and certainty; and to effect this, they think a commission of scientific and practical men ought to be appointed to adjudicate on the validity of patents; and that such a body might be worked in this way:—Eminent men, in different branches of science and art, might be placed in the roll of Commissioners, and each party in the cause (plaintiff and defendant) should ballot for one member; the two thus elected should then sit as assessors to the Privy Council, or other court. The adjudication of the validity of the patent to rest with Privy Council, or other proper court; the ordinary courts to judge only as to the charge of infringement or piracy, and any court to be able to entertain these cases; the course to be taken, in case the patent may be averred to be void, to be reserved for the Patent Court.

It is quite certain now is the time for the inventors to push forward; and they cannot do better than strengthen the hands of the league, who request parties to make suggestions for the permanent improvement of the law.

#### THE IRON TRADE OF SOUTH STAFFORDSHIRE—PAST AND PRESENT.

Fifty years ago, there were in South Staffordshire about 40 blast-furnaces, producing, on an average, say 30 tons each of pig-iron weekly, or an annual make, in the aggregate, of 60,000 tons; and as this district has very rarely exported pig-iron, we may assume that such annual produce was applied for conversion into malleable iron and castings. If we deduct from this quantity (say) one-third, to meet the requirements of the foundry, and the waste of conversion into malleable iron, we shall have as the probable make of such an article in South Staffordshire 40,000 tons annually.

An allowance of one-third, or 20,000 tons, may appear very large for such objects, and was assuredly a large drawback upon such a make of pig-iron; but whoever is acquainted with the somewhat strange and complicated system of manufacturing iron which was then pursued, compared to the present simple process, will not be much astonished. In those days a puddling-furnace was a very rare sight indeed, and, perhaps, not much thought of previous to their introduction by Mr. Cort. Equally distant was the idea of rolls, for rolling the iron into required forms, the hammer being the only machinery employed for that purpose. "Chafferies," "lumping fires," and "hollow fires," have long been dispensed with, along with the tedious, though not objectionable, system of "stamping;" and there can be no doubt but some of the more intelligent manufacturers of that day imbibed the thought, that the time would come when a much greater progress would be made, and that an article of such utility must gradually become more generally appreciated, and more largely applied; but the very crude and uncouth form in which it was produced, undoubtedly prohibited a more general application. Finished iron could not then be obtained in any other shape than the hammer was capable of giving, and for this an excessive high figure was demanded, so that to the foreign consumer it must have been a costly article indeed. Truly, such were the days of infancy in the iron trade; but in proportion to the advancing requirements of the age has been the progress of art and science; and as the mind of man is gifted with an imaginative and inventive capacity, so we find that in that day his powers were brought to bear on the subject of iron manufacture. If the history of the iron trade be carefully marked from this period upwards, we shall find that gradually the old system gave place to improvements, and that every improvement had the effect of a larger produce, and, consequently, a cheaper price. As the demand increased the capability of produce increased with it; and so events progressed till the commencement of that extraordinary era—the introduction of railways. From this period the iron trade may date what may be called its second birth. A new world, comparatively speaking, thus lay before it; and its requirements came upon the trade in such a manner as to convince the manufacturers of their utter inability to meet them. The consequence was the erection of other works, upon an extensive scale, and the enlargement of those which already existed. Twenty-five years ago, South Staffordshire had not more than 20 bar-ironmakers in it, whose united weekly produce could not much exceed 3000 tons; and although (as will be seen from the accompanying list) the capability of production has increased in a three-fold ratio, still such increase has literally forced itself upon the trade, by the impetus given to it in the demand for rails, and a further development of local requirements. But the old rule of supply and demand was here called into requisition; and as the means of supply were found inadequate to meet the growing demands, and urgent calls were made upon the manufacturers, the only course left for them was to increase their make in proportion, and the very circumstance of a new demand, arising from such an unexpected source, justified them in so doing; special cases require special treatment. Had no improvements been made upon the old system of manufacture, what could have been done with the enormous demand for rails which has subsequently arisen? It, no doubt, occurred to the more reflective manufacturer that such a species of demand would eventually subside, and that when it so happened disastrous results would follow. The visitation has accordingly come, and with its predicted consequences, which the trade has in truth felt; it is even now smarting under the blow inflicted. The reverses which the railway system in general has experienced have, no doubt, hastened the crisis, and the unprecedented heart-sickening commotions of the continent have added their share to the generally-felt and crushing depression of the last three years.

That the trade generally is now unproductive of profit to the manufacturer, is beyond all doubt; and although the make is curtailed fully two-fifths, still prices continue remarkably low. There can be no doubt but the present ratio of make is such as meets the limited demand, and must, if adhered to till the spring of the year, at least have the effect of bringing higher prices; the continent has been all but closed to the trade for the last three years, and the wants there must be considerable, and must ultimately be supplied; and if the heavy import duties which some of the foreign Governments see fit to impose were so revised as to admit British iron, a good effect must follow. The United States, too, must contribute her quota of orders for railway bars, in addition to other kinds, for America is not yet thoroughly covered with railways; while Germany, Russia, and other countries, will yet require enormous quantities; and who is so fitted to furnish such an article as the British manufacturer?

This is not the day for maintaining high protective duties, especially when Great Britain has taken the lead in an opposite direction; and

should the foreign Governments in question still persist in enforcing them, it then becomes a matter for the consideration of the people themselves, whether they will consent to pay for such a necessary article 20 or 30 per cent. more than they ought. The evil will, no doubt, work its own cure, for unless such countries are determined to shut themselves up, and not allow competition, they must be content to remain as they are, and while other nations are making rapid advances, they cannot expect to keep pace with them; meantime, however, it will be serving both them and the British manufacturer to remind them occasionally, whether through the public press or otherwise, of the gross injustice to which they are subject. Such a course may have the effect of hastening so desirable an object; and there can be no doubt but other discoveries will yet be made, which will offer a valuable boon to the manufacturers, who could have foreseen the development of the railway system. Previous to its introduction we have seen what was the situation of things; and there is now quite as good a show of reason in supposing that some similar gigantic scheme will be propounded, as the manufacturers of former days had in reference to the railway scheme. We are too apt to look at the surface of things; we know how to deal with things present, but things to come are hidden to us, and, therefore, the discoveries which time will unfold.

It will be seen from the accompanying table, that although the manufacturing ability of South Staffordshire is now immense, the makers have cut down their produce to meet the restricted demands. The table may contain some few inaccuracies, but, on the whole, may be taken as giving a tolerable idea of its real position.—E. T. Tipton.

#### MALLEABLE IRON-WORKS IN SOUTH STAFFORDSHIRE, EMPLOYED AND UNEMPLOYED, IN 1850.

| Name of Works.                      | Capable of producing weekly. | Present assumed produce. | Owners or Occupiers.     |
|-------------------------------------|------------------------------|--------------------------|--------------------------|
| EMPLOYED.                           |                              |                          |                          |
|                                     | Tons.                        | Tons.                    |                          |
| Gold's Hill, Wednesbury, & Toll End | 700                          | 400                      | John Bagnall and Sons.   |
| Shrubbery, Swan Garden, & Bradley   | 600                          | 500                      | J. B. Thorneycroft & Co. |
| Stourbridge, Brierley, & Brockmoor  | 500                          | 500                      | John Bradley & Co.       |
| Bloomfield and Tipton Green         | 500                          | 500                      | Barrows and Hall.        |
| Wednesbury Oak                      | 400                          | 300                      | P. Williams and Sons.    |
| Horsley Fields and Bilston Mill     | 350                          | 200                      | W. H. Sparrow & Co.      |
| Spring Vale                         | 400                          | 250                      | George Jones.            |
| Chillington and Lea Brook           | 300                          | 200                      | John Barker & Co.        |
| Albion                              | 300                          | 200                      | Walter Williams.         |
| Bromford                            | 300                          | 200                      | William H. Dawes.        |
| Corncreaves                         | 300                          | 200                      | British Iron Company.    |
| Crook Hay                           | 200                          | 200                      | Thomas Davis and Sons.   |
| Branswick                           | 200                          | 100                      | Charles Geach & Co.      |
| Tipton.                             | 200                          | 150                      | E. Cresswell and Sons.   |
| Leys                                | 200                          | 200                      | Brown and Freer.         |
| Cradley                             | 150                          | 150                      | Samuel Evers and Sons    |
| Level.                              | 150                          | 120                      | Hall, Holcroft, & Co.    |
| Bomley and Brettel lane             | 150                          | 130                      | J. and W. Wheeler.       |
| Pelsall and Golds Hill, New         | 150                          | 120                      | Davis and Bloomer.       |
| Boway                               | 120                          | 120                      | E. Page and Sons.        |
| Green's Green                       | 120                          | 120                      | J. Hartland and Co.      |
| Smethwick                           | 120                          | 120                      | Spittle and Downing.     |
| Spon Lane                           | 120                          | 120                      | Silvester and Jackson.   |
| Darlaston Green                     | 120                          | 120                      | Bills and Co.            |
| Bankfield                           | 120                          | 120                      | Coulbourn and Co.        |
| Ettinghall                          | 120                          | 120                      | William Haden.           |
| Dixon's Green                       | 120                          | 120                      | Plant Brothers.          |
| Dudley Port, New                    | 120                          | 120                      | F. Giles and Co.         |
| Tividale and Dudley Port            | 120                          | 120                      | J. Williams and Co.      |
| Whittington                         | 100                          | 100                      | Lee and Bolton.          |
| Hyde                                | 100                          | 100                      | Various.                 |
| Sundry small works                  | 500                          | 500                      | Various.                 |
| UNEMPLOYED                          |                              |                          |                          |
|                                     | Tons.                        | Tons.                    |                          |
| High Fields                         | 200                          | —                        | J. P. Firmstone.         |
| Oak Farm                            | 400                          | —                        | W. Gladstone and Co.     |
| Phoenix                             | 300                          | —                        | Galvanised Iron Co.      |
| Brierley Hill                       | 200                          | —                        | British Iron Co.         |
| Caponfield                          | 150                          | —                        | James Foster.            |
| Bradley, New                        | 120                          | —                        | Ditte.                   |
| Factory                             | 120                          | —                        | Welch and Barrows.       |
| Lea Brook, Old                      | 100                          | —                        | W. Bailey.               |
| Smethwick, Old                      | 100                          | —                        | J. Hartland and Co.      |
| Sunderland, Old                     | 150                          | —                        | John Williams and Co.    |
| Sundry small works                  | 200                          | —                        | Various.                 |

Total ..... 10,340 ..... 6,400  
Those works marked (\*) make rails, in conjunction with other kinds of iron.

#### THE VENTILATION OF COLLIERIES, THEORETICALLY AND PRACTICALLY CONSIDERED.

Mr. William Price Struvé, C.E., read a paper on this subject, at the Institution of Civil Engineers, on Tuesday.

The author commenced by showing that the general principles which ought to govern the ventilation of collieries, were:—1. That a current of air through the channels of collieries at a velocity of 5 feet per second, was sufficient for most purposes.—2. That a current exceeding that velocity would only be attained at the expense of leakage and other evils.—3. That in order to obtain the requisite supply of fresh air, the channels of a colliery or mine ought to be enlarged, according to the exigency.

In the process of laying out a mine, a subdivision occurred, by which the workings were apportioned into numerous compartments, which facilitated the system of splitting the current of air, or diverting it into numerous channels, giving to each compartment a separate and, therefore, more effective ventilating force; at the same time the area of the channel was enlarged, and the aggregate length of the air tube shortened, so that it was quite practicable to pass through the workings of a mine 300 cubic feet of air per minute for each man employed. The velocity of the air current in a mine was so easily effected, that it was important to consider by what accidents, and under what circumstances, any changes took place.

It could not be supposed that the excavated space of old workings was completely filled by the "falls" of the roof and "creeps" of the floor; extensive rupture of the stratification occurred, and through this broken ground great leakage must take place. This would seriously affect a long continuous air course, therefore the way to meet this difficulty was to split, shorten, and enlarge the air channel. The details of two experiments at the Eaglesbush and Ynis David Collieries, where the air was pumped out by Mr. Struvé's mine ventilator, showed that a large proportion of the air was drawn from the old workings, and the "goaf," or broken ground surrounding the colliery, and did not come down the intake shaft, and traverse the actual workings, as it ought to have done. In both these cases, the enlarging and splitting of the air channels, so as to reduce the velocity of the air to about 3 or 4 ft. per second, would have produced beneficial results.

These principles were shown to have been lost sight of in the majority even of the great collieries, and the power of rarefaction by a furnace, was trusted to for dragging the long column of air over and through innumerable impediments. In some cases this was left to be produced by the increased temperature of the mine from the candles and the respiration of the men, aided by the cooling effect of water trickling down the intake shaft. These scarcely sufficed to produce an average difference between the two shafts of 13° in winter, whilst in the summer, and in certain states of the atmosphere, there was no difference at all, and, consequently, little or no ventilation. Where rarefaction by heat was used, the temperature in the upcast shaft varied from 90° to 160°; this, however advantageous for ventilation, was injurious to the shaft itself, and absolutely dangerous to the men who had to traverse it.

A comparison of the dimensions of the air passages and the velocities of the currents in numerous collieries, led to an estimate of the motive-power required to produce the results attained in the best ventilated mines, in case of the employment of a steam-engine and air-pumps. This power would have varied between 23 horse-power and 26 horse-power.

The efficiency of furnace ventilation was always increased by the depth of the shafts, especially if they were entirely devoted for the purposes of ventilation, irrespective of the working of the pit.

The experiments of Mr. Nicholas Wood, Mr. G. Elliot, Mr. H. Vivian, and other mining engineers, were then quoted, to demonstrate the insufficiency of the "steam jet," as a means of promoting ventilation, showing that it was a most wasteful application of power, when compared with the steam force employed to work Struvé's mine ventilator at the Eaglesbush Colliery. This apparatus consisted of two hollow pistons, resembling large gasometers, plunging into cisterns of water, and having inlet and outlet valves. The pistons received alternate motions from a small steam-engine of 5 horse-power; and being filled and emptied at each revolution of the crank, produced a regularity of current and a degree of copious ventilation hitherto unknown in the mines to which they had been applied. The small cost of their establishment—only about 100*l.* for an extensive mine—joined with the little liability to getting out of order, was much in their favour. The paper terminated with copious extracts from the able mining reports of Mr. John Phillips and Mr. Kenyon Blackwell, confirming all the positions assumed by the author.



## Original Correspondence.

## FOREIGN TARIFFS—THE IRON TRADE.

SIR.—At the present moment, when the fresh distractions of United Germany prompt the question, "What is to become of the proposed reduction in the iron duties?" the following may be of interest:—To equip a foot soldier, 15 lbs. of iron are required; and for the same money, without duty, 30 lbs., or the equipment of two soldiers, could be obtained from England: the loss of 15 lbs. per man becomes a loss on 100,000 men of 1,500,000 lbs., or on 200,000 men of 3,000,000 lbs. A horse soldier requires at least 25 lbs. iron, and protection prices compel the Government to pay for 50 lbs. The millinery requires, according to well-authenticated reports, including balls, &c., 500,000 centners, which, at the average price of 4 rix dol. per centner, gives two million thalers, or (as from England the requirements could be supplied at 2 rix dol. per centner) one million thalers more expenditure than would be necessary were there no duty; and one million wasted at the outset!—a million which the land must produce from labour—from that labour which, in times of peace, is prevented and destroyed by the increased expense of iron through duties; and, as the above shows, even the arts of war are great sufferers. It is possible that the million now thrown away will be needed in the decisive moment—that the increased expense of the most important material, whether for peaceable or warlike purposes, may prevent the success of a war. Perhaps it is as well that the pugnacious spirit evinced by the sons of the common fatherland be checked; but the sacrifices made are by no means willing ones, as the growing discontent evinced in all parts of the continent at existing duties clearly shows. The exertions and rapid progress in public opinion the free-trade party abroad is now making, warrants the hope of a successful termination of their efforts, not ultimately, which is certain, but speedily; and the heavier the burden becomes, the more strength this party gains, and the more dangerous becomes the position of that most thick-skinned of Ministers—M. Van der Heydt. B. London, Nov. 19.

## COPPER SHEATHING.

SIR.—As the Admiralty officers can hardly be expected to answer the observation in your last leader, it may be right for one conversant with the facts to give you some explanation.

The case is not so simple as you suppose. It is easy to render copper durable, either by protection or alloy, and to identify such alloy by analysis; but in either case, such sheathing is liable to foul, and impede the ship's way, to greater loss than the value of the metal.

The object is to get a sheathing which will wear clean, and yet not waste; and this is a nice point, subject to so many and various agencies; in fact, many samples which have wasted rapidly at sea, resist the action of corrosives better in the laboratory, than others which have been much more durable in use.

There are the mechanical actions, of sailing, rolling waves, and storms; the electrical action of thunder; the more corrosive power and higher temperature of tropical seas; the sulphuretted hydrogen generated from mud, and the oxygen from weeds; difference in the mechanical texture (in rolling); and imperfect homogeneity of the metal (in mixing); the electro-chemical relation of the nails, protecting the sheathing, or the reverse; all (and as many more indirect causes) independent of the analytical composition of the copper.

Some of the old sheathings have worn clean upwards of 20 years; yet others of very similar analytical composition, and which have resisted corrosives as well (or better) in the laboratory, have been eaten through within 12 months, at anchor; whilst others, again, of different composition, have stood several years. Nor do these durable old sheathings agree so nearly together in analysis, as to form a rule, to which the others would be the exceptions. These facts (which may be multiplied beyond what you would like to print, or I to write, or your readers would have patience to read) are enough to show that neither analyses, nor laboratory experiment only, are enough to ensure the clean wearing and durability of the copper. The Dutch and Danish chemists, as well as others in this country, have found the same perplexity; and after employing great part of 10 years, and some thousands of experiments, in the investigation, in consideration of its importance to the naval and mining interest (chiefly at my own cost, though, of course, not without the hope of ultimate personal advantage), I also find myself still obliged to fall back upon their declaration, that "analysis would not detect or decide it." Meanwhile the Admiralty appointed a committee on metals, of gentlemen well qualified for the duty, under whose suggestion a great number of practical sea-going and harbour experiments have been going on, from year to year, and are still in progress; the manufacture has been traced and watched through every process, from the sorting of ores to the picking of the sheets; and minute registers have been kept of the operating causes and indications, direct, indirect, and supposed of the sea waste, or durability, of the metal, from sheathing to stripping. I believe no department of Government has been more zealously and diligently attended to than that of copper sheathing.

Old dockyard officers say, that the former sheets had a more uniform aspect, both in colour and gloss, than those of recent make; but this may have depended merely on the pickling, for there are many recorded failures in the last century. But if I recollect right, "A Roaster Man" said, in the course of our correspondence in your columns, that if it could be shown to be the interest of smelters to turn out "such copper" (meaning clean wearing and durable sheathing) they would do so.

Hence he would seem to know the secret; and I think it would be well worth the while of Government to make it their interest, by a yearly per centage upon such wear above seven years; and a like drawback upon failure within that time.

The difference in character of the waste is remarkable; some wears away smoothly, as thin as paper, before holes appear; other gives way in blotches; other in streaks and marblings; and other in specks, which you called pock-marks.

The specks might be referred, so far as the quality of metal is concerned, to want of perfect mixture of the different portions of the refining pool, producing voltaic points of reaction; the blotches to the same, on a larger scale; the streaks to a sort of "grain," produced by imperfect rolling; and the uniform wear to undue softness, or injurious alloy. But I am not yet in a condition (considering the multiplied causes above noticed) to assert that it is so. If the discussion with the practical smelters had continued, I think the whole would have been brought to light, showing what was intrinsic in the metal, and how occasioned; and what attributable to external causes. The remedy I think not very problematical, where skill and integrity can be depended on. J. PRIDEAUX. November 20.

## IRISH REGENERATION.

SIR.—It would have been very satisfactory if your correspondent, Mr. Yarrow, had stated what is the present amount of the consumption of peat-charcoal in Dublin at the price of 2l. per ton, what is the prospective increase of demand, and whether the annual quantity of 12,166 tons poured into the market will produce any depreciation of its value. It is upon such data that a solid opinion can alone be formed of the prospect of regenerating Ireland by the regeneration of her bogs, not upon the name of a company finding a place in the monetary transactions of the London market. It is upon over-sanguine calculations that loss and disappointment are generally grounded. The coal companies of the year of mania thus framed their golden dreams:—A tract of acreage was surveyed, and the quantity of coal underneath it estimated. As many pits as convenient were supposed to be sunk upon the estate. The yearly quantity was calculated which these openings could deliver, and the amount of profit per ton, conceived to be realised by some shrewd neighbouring collier, was multiplied into the imaginary vend. The process of division by the factor so obtained was then performed upon the contents of the whole estate; and the yearly fortune realised in a moment for a period from 100 to 500 years. The effects of over-production in diminishing price was not an object to be considered. The lively produce would effect its own sale to a certainty; and the disadvantage of a public management, which absorbed more per ton than the whole profits of their economical neighbour, was forgotten. I sincerely hope the Irish Amelioration Society is pursuing no such *ignis fatuus* in their peat fires. Probably not; but when a statement of "a few figures" is put forward as the basis of such great results, the experience of former companies may be expected to ask a few more figures in confirmation of these gratifying hopes. D. MURK. November 16.

## PREVENTION OF CORROSION OF WIRE-ROPES.

SIR.—Your Journal of the 26th Oct. contained the following inquiry from "T. C. T." Carlisle:—"What will prevent the corrosion of one of Newall's patent wire-ropes, which is daily in use upon an incline plane?" I have had such ropes in use on all the drawing-machines and horse-whims on the Duke of Devonshire's lead mines here for many years; and also at the Earl of Burlington's slate-works, near Ulverston, and have made use of many compositions for the prevention of corrosion; but the best, and the one which answers the purpose admirably, is made by Joseph Smith, of Burnley, in Lancashire. As a proof that our ropes have not been much injured by corrosion, and also of their durability, and therefore, of the propriety of their general application on the point of economy, I need only say that at the slate-works referred to there is now a wire-rope, on a self-acting incline plane, about a mile in length, that has been in constant use for about four years, and that without a single accident of any kind, arising from any defect of the rope; and, to all appearances, it may be continued in use for years to come, although it has been completely exposed to all the changes of the atmosphere. STEPHEN EDDY. Grassington, near Skipton, November 18.

## EXHIBITION OF 1851.

SIR.—I regret to find from Mr. Rundell's letter, published in your last Journal, that so small a portion of space in the great building has been applied for by the miners of this country for the exhibition of their works of industry. It would, doubtless, be very desirable to exhibit all the processes in mining, from the time the ores are brought to the surface till the metal is sold to the merchant for smelting. The operation of smelting, I understand, is to be exposed. It has occurred to me that it would be a good time between this and March next for persons of inventive genius to apply their thoughts to two subjects of desiderata in mining economy—viz.: a cheaper mode of draining mines, and a more cheap and expeditious mode of breaking the ground. It may appear chimerical to some persons to intimate the possibility of any improvement in either of those modes; but, considering what has been accomplished within the last half century, I have little doubt that ere another half century elapses, those two important objects will be attained; then many mines which are now idle could be profitably worked.—Wheal Vor Consols and Wheal Abraham, to wit. I merely throw out this hint, that thinking men may direct their thoughts to the subject.—R. SYMONS: Truro, Nov. 20.

## THE "COST-BOOK SYSTEM"—LIABILITY OF PURSERS—IMPORTANT CASE.

A petition has been brought before the Stannaries' Court, in which Messrs. Harvey and Co., of Hayle, were the plaintiffs, and Mr. Joel Higgins, managing agent of Wheal Reeth, near Redruth, was the defendant. The plaintiffs had supplied goods to the adventurers to the amount of 503l. 13s. 9d., as was alleged, on the credit of the materials, and the petition was for the recovery of 200l., the balance on the amount of goods supplied to the mine. The account of supplies was not disputed, and the point to be decided was a legal one. Messrs. Hockin and Chilcott argued the case on behalf of the plaintiffs, and Messrs. Roberts and Darke were for the defendant.

Mr. Roberts, in stating the grounds on which the claim was resisted, went into the following details, which will show the nature of the case. He said it was simply a question of law, as to whether the plaintiffs had a right to look (in the language of the petition) to the machinery and materials of the mine for payment of the 500l., or rather of the 200l. which now remained due. The period during which the supplies were rendered, extended from January to June, 1849. It would be found, however, on looking at the cost-book of the mine, that the bills for January, February, and March were brought into account in March, but for some unexplained reason, there was no meeting, as was usual, for the auditing those accounts. They were entered, but not audited; the accounts were in fact not audited at all till the 18th of September, 1849, when they were audited down to the end of June, 1849. Consequently, in the accounts which were not audited until September, 1849, the whole of the accounts for the six months extending to the end of June were included. Now the appointment, as seen in the cost-book of the purser, took place in November, 1848, when, by a resolution, Mr. John Batten, of Penzance, was appointed pursuer. From that time the pursership continued without any name appearing in the cost-book as to who was the pursuer, the only reference made in the accounts being for salary, pursership so much. But after the audit of accounts in September, 1849, there are resolutions and entries from which it appeared that Messrs. John Batten and Son were treated as the pursers.—The Vice-Warden inquired whether any point turned on the pursership, as Mr. Higgins was stated in the petition to be the managing agent.—Mr. Roberts replied that a great deal turned on that; Mr. Higgins had been recently appointed agent in consequence of the failure of Batten and Son, on which this whole matter turned. It appeared, then, that after September, 1849, Messrs. Batten were treated and spoken of as the pursers. Now, the cost-book, at the audit in September of the accounts to the end of June, set out a balance against the adventurers, and in favour of the purser, of 540l. 3s. 2d. In that same account the pursuer had included and charged the Messrs. Harvey's bill of 503l. 13s. 9d. As he had stated, this was an audit on the 18th of September, 1849. Messrs. Harvey and Co. were, and had been throughout, adventurers as well as persons supplying the mine, and Messrs. Batten and Son had been long prior to, and during this period, also adventurers. On the 27th of September, nine days after the auditing of these accounts, the Messrs. Harvey make this arrangement with Messrs. Batten and Son in regard to their bill of 503l. 13s. 9d. They take from Messrs. Batten and Son payment in cash of 3l. 13s. 9d., and they take for the balance of 500l. a bill from Messrs. Batten in the following words:—"500l.—Two months after date pay to our order in London, 500l., value received on supplies in Wheal Reeth."

At the audit of accounts on the 18th of September, 1849, Messrs. Harvey were present as adventurers, and of course were informed of the contents of the cost-book, and of their supplies having been charged. Messrs. Batten and Son were also present as adventurers and pursers. After the 27th of September they continued in the pursership, and received the ore bills up to the 26th of October, 1849, and paid the costs to the end of September, 1849. The ore was paid for by the smelting companies in bills at 30 days' date; and he found that on the 22d of August there was a tin bill from Chyanour Smelting House of 265l. 5s. 9d. On the 30th of August, 1849, there was a bill to the amount of 723l. 0s. 10d.; on September 27, there was a tin bill of 751l. 19s. 2d.; on Oct. 19, from the Chyanour House, a bill of 276l. 16s.; and on the 26th of October another bill of 714l. 3s. 2d., making a total of 2731l. 4s. 11d., which had been received by Messrs. Batten. Then on the 13th of November, 1849, Messrs. Batten and Son failed, and suspended payments. The two months' bill which they gave to Messrs. Harvey would become payable at the end of November; and now it would be seen how the debt was reduced to 200l., inasmuch as Messrs. Batten had compounded, and 300l. had been received on this bill by the plaintiffs without prejudice. The bill was negotiated by the plaintiffs; the drawer indorsed it, it was presented for payment when due, then was dishonoured, and the indorser had to take it up, and it came back again. Now, since Messrs. Batten's failure, the accounts of the mine had been examined, and it had been ascertained that on the 27th of September, when they gave the acceptance to Messrs. Harvey, they were in reality debtors to the adventurers to the amount of 567l. 11s. 9d. Then, on the closing of Messrs. Batten's account on the 14th of November, the balance against them was found to be 498l. 18s. 10d., upon which the adventurers had received a composition. That being the case, the adventurers, on plaintiffs' application for payment by them of the 200l. owing on the acceptance, have resisted the claim on the ground that Messrs. Harvey, by their conduct and the course they had adopted in taking the acceptance, had accepted Messrs. Batten and Son as their debtor.

It further appeared that there were private accounts kept by Messrs. Batten between them and Messrs. Harvey, in which the latter were charged with the calls due from them in Wheal Reeth, and credit was given them for their supplies as charged in the cost-book, and in his private account there was an entry of this particular transaction—viz., the payment of 3l. 13s. 9d., on the 27th of Sept., 1849, with an acceptance for 500l.; and in Messrs. Harvey's own books there was an entry of the bill, in account with Wheal Reeth, as follows:—"By cash, 503l. 13s. 9d. On these facts, the learned counsel contended that the plaintiffs had discharged the mine by taking the acceptance in the form they had done from the purser; and argued further, that, in the absence of any particular agreement, a pursuer, according to the laws and customs of the Stannaries, would, in his mere character as agent, have no power to borrow money, nor without the sanction of the adventurers would he have any power to pledge their credit in a mine.

The Vice-Warden—A pursuer cannot pledge the mining adventurers' credit by accepting bills in their name.

Mr. Roberts—That is a clear principle your Honour has recognised several times, and which has been several times decided in the superior courts; and from time to time in your decisions you have made observations with regard to the duties of pursers, which not only result in that, but in which you have laid it down that there is very great accuracy and particularly required of the pursuer in keeping his cost-book, and in keeping not only an accurate list of the adventurers, but an accurate state of accounts. Your Honour has also, I believe, laid it down that the ordinary mode in which a mine on the Cost-book System is carried on, is by means of calls, or by means of the profits which arise.

The Vice-Warden—I have never said that. I have said the great meaning of the Act of Parliament expression of "the cost-book" is, that the names of the adventurers and the several transfers must appear. But I have never been called on to say how the accounts should be kept; it may be regular to keep them by calls, and it may be one of the great regulations that there should be regular audits and regular calls.

Mr. Roberts then cited Hambly v. Tregellas and Others, tried in the Vice-Warden's Court in 1840, and spoke of the particularity with which his Honour had always considered the cost-book ought to be kept, and of the duties which a pursuer had to perform. He submitted that the duty of a pursuer was not to pay merchants by bills, but if he had not in hand the means of paying for the supplies, and of discharging the liabilities of the mine, that a call should be made, rather than a pursuer should resort to the giving of bills for the payment of merchants' accounts. He also cited several *nisi prius* cases, in elucidation of the question as affected by the law of the land, with reference to any particular custom in Cornwall. Mr. Roberts commented on the cases he had cited, and went on to state that on the 18th September, when the accounts in the cost-book were audited to the end of June, though Messrs. Batten appeared in the cost-book as in advance to the mine 540l. 3s. 2d., yet it had since been found that they were then in arrear 567l. 11s. 9d.; this did not include Messrs. Harvey's bill, 503l. 13s. 9d., which the pursuer had charged with other bills in the cost-book, but which had not been paid; thus making the whole amount due from Messrs. Batten to the adventurers 1071l. 6s. 6d. This balance, however, included an August ore bill of 723l. 0s. 10d., which on the 27th of September had three days to run. If the plaintiffs, instead of taking the bill, had filed their petition in equity, the adventurers would have found that Messrs. Batten was then in their debt, and would probably have seen that he applied the money due from them to the payment of plaintiffs. As, however, plaintiffs had chosen to take the bill from Messrs. Batten at two months, and Messrs. Batten had failed in the interim, plaintiffs must take the consequence of having relied on the pursers' individual security.

The cost-book and Messrs. Harvey's ledger, and other accounts, were then put in as evidence, and the clerk of Messrs. Batten, at the time of their failure, was examined in support of defendant's case.

Mr. Darke also addressed the court for defendant. He thought it erroneous to speak of a cost-book as showing the state of accounts between the pursuer and the adventurers in a mine. The cost-book contained merely a statement (if he might so speak) of the stock of the partnership, or, in other words, of the assets and liabilities, and, as kept, it amounted to nothing more. It does not appear on a cost-book whether the amounts charged by the pursuer have been paid or not. It was clear they must be entered at a period when they were not paid, because they must be audited and sanctioned by the adventurers before the pursuer has a right to pay them. The adventurers say, "we authorise you to pay those accounts; if you want money, make a call on us;" but the cost-book itself does not in any way show the state of the cash account between the pursuer and the adventurers. The cost-book, in fact, does not show the state of the accounts at the time the balance is struck, for then bills are charged which are not paid; so that in the present case, when the 540l. balance was struck every man who was present was certain that that was not the state of the cash account with the pursuer. Messrs. Harvey were present through their agent at the account meeting on the 18th of September, when the accounts were made up to the end of June, and the pursuer was shown to be in credit 540l. 3s. 2d. But the cost-book shows distinctly that 500l. was charged that day which had not been paid, and that there had been no audit of 855l. 7s. 7d., bills charged up to the end of March. Therefore the pursuer was no more in a position to pay the bills of 855l. 7s. 7d., than that of 500l.; so that at the time Messrs. Harvey attended by their agent they had evidence that Messrs. Batten had not paid those two amounts, even assuming that they had paid everybody else at that time.

The cases of Strong v. Hart, and Smith v. Ferrand, were then referred to by the counsel, to show that where a creditor, having the power of getting cash, takes a bill, he does so at his own risk, and it is for him to prove that he could not get that cash, before he can fall back upon the original partners. In this case, Messrs. Harvey's claim on the mine was a joint claim on all the adventurers, and from the relative position of the parties as co-adventurers, that claim was to some extent difficult to be enforced. Yet, inasmuch as there had been an agreement by plaintiffs to substitute another mode of payment, by which they were now bound, and for which there was a good consideration, because plaintiffs were benefitted, or might have been, and defendant was damaged.

Mr. Hockin in reply, contended that the case on the other side turned on technical objections, which ought not to find favour in a court of equity, and also that the fact of the bill being drawn for Wheal Reeth was a proof that it was not a private transaction with the Messrs. Batten, as had been alleged. The cases cited were all common law cases, and different from the present. As regards the pursers' duties, it was the most ordinary routine in the county for a pursuer, if he were not in cash, to accept a bill to pay a merchant. This case was a simple transaction between debtor and creditor, Messrs. Harvey and Co. on the one side, and the adventurers represented by Messrs. Batten, who were adventurers, on the other. It was not simply a question of accepting the bill of an agent, but it was the accepting a bill of one of several debtors, and no case in common law, much less in equity, went to show that if one debtor gives a bill the others are discharged.

While the learned counsel was proceeding with his argument, his Honour, the Vice-Warden interposed, on account of the lateness of the evening, stating that he was obliged to be in London on the following day, on public business; and as the case could not be then brought to a close, the rest of the arguments must be heard at the next sitting in February. He had been given to understand that the case was simply whether the taker of the bill in this instance, discharged a lien, or something in the nature of a lien, and if there was not a right of lien, that no other question would arise. He suspected it would resolve itself very much into that question now. Because, even supposing the party who had taken the bill had not taken it for money, but for his own convenience, and supposing he had not thrown the loss upon the mine adventurers, he still may have acted by taking the pursers' bill at two months, instead of going to the mine for money, as to render it very unfair that he should be able to hypothecate and sell these goods, because these goods may not belong wholly to the adventurers who incurred the debt, many of whom have got out of the mine, and sold to innocent holders; the adventurers may have been allowed the use of the goods by third parties, who ought not to be prejudiced, though perhaps they must take the chance of all thoroughly good and straight-forward acting creditors. He understood that would be the point to arise in the case.

Mr. Hockin then named a number of cases which he intended to cite, and the Vice-Warden said there would be scarcely any delay, for if the case were entirely heard now, he should not give his judgment until the next sitting.—Mr. Darke pointed out that there was a subsequent statement in the cost-book regarding the acceptance by the adventurers of Messrs. Batten's composition.

IMPORTANT TO MINING COMPANIES.—POOR LAW LITIGATION IN WICKLOW.—The Mining Company of Ireland having been enormously taxed, by over-valuation of mines for rating to relief of the poor, contrary to the practice in the mining districts of England, the directors, after numerous applications to Boards of Guardians for relief, appealed to the Assistant-Barrister in quarter sessions, in several districts, and those appeals have generally been successful, the barrister and assisting magistrates having been permitted to dispose of them upon the merits; but on a recent occasion, at Wicklow, the numerous objections started by the attorneys acting on behalf of the Rathfriland Board of Guardians, showed a strong disposition to avoid entering upon the merits, in which they were so far successful as to obtain a postponement of the decision, until January sessions, at Bray, on the ground that one of the two magistrates presiding with the barrister, being an ex-officio Guardian of the Rathfriland Union, could not adjudicate on the appeal; and that Mr. Wyse, of the head-office, before whom the recognizances were perfected, is not a magistrate for Wicklow, although it is specially provided by the Act 5 Geo. IV. c. 102, s. 9, that magistrates of the castle division of Dublin Police are ex-officio magistrates for the adjoining counties of Wicklow, Kildare, and Meath. When the case shall be decided, we shall, probably, publish the proceedings at Wicklow and Bray, for the information of the mining interest, who have strong claims to be placed on the same footing as similar interests in England have been with regard to rating for relief of the poor.—*Dublin Mercantile Advertiser*.

THE DURHAM COUNTY COAL COMPANY.—In the Court of Queen's Bench on Thursday, Lord Campbell delivered judgment in the cause *Humphreys v. Bromfield*. His Lordship said this was an action upon the case, and the declaration alleged that the plaintiff was possessed of divers closes, pastures, &c., and that the defendant (who represented the Durham County Coal Company) wrongfully worked certain mines underneath the said closes, without leaving sufficient pillars, and in contrary to the custom of mining used in the county, by reason whereof the soil of the plaintiff's land swaged and sank. A verdict was given for the plaintiff, with 1000l. damages, leave being reserved to the defendant to move this Court for leave to enter the verdict in his favour, if the Court should be of opinion that the action was not maintainable. The opinion of the Court was that the action was maintainable, and that the plaintiff was entitled to be protected from mining operations which affected the surface of his land. His Lordship entered into an elaborate examination of all the cases which had been decided on this subject, referring also to the opinions of foreign writers, and concluded by saying, that the rule which had been granted for entering the verdict for the defendant must be discharged.

CELLARS COLLIERIES.—This large pit, the property of Messrs. Crawshaw, is now nearly completed, and when in full work will yield an immense quantity of coal. The quality of the article is said to be excellent, and the whole of the machinery reflects the highest credit on Mr. Williams. In the construction of the machinery every improvement has been introduced.—*Swansea Herald*.



## ON THE GEOLOGICAL AND MINERAL FEATURES OF CERTAIN DISTRICTS OF NORTH WALES.—No. IV.

BY ST. PIERRE FOLEY.

The geological structure of the Amphitheatre mountains, which look down from the west, north, and south on the beautiful valley through which the crystalline Pennant flows, is chiefly composed of clay-slate and trap-rocks—the clay-slate forming the basic mass, and the trap or hornblende varieties either capping the same, or, as on the southern side, forming ridge-like steps, descending almost to the plain beneath, occasionally regular, but more generally appearing in vast confused heaps of rocks of immense magnitude.

An intermediate rock, partaking of the nature and elementary characters of the clay-slate and trap, lies on, and apparently in, the former, having its cleavage planes similar, but its crystalline structure approaching, to that of the latter. This rock is chiefly composed of hornblende paste, in which small crystals of felspar are disseminated, with occasional brecciated laminae of small squeezed-like pieces of talc and chloritic slate, and some thin and irregular veins of quartz. This rock, called by the local miners *granite*, is of the porphyritic schistose character, and is generally looked on as a hopeful indication of rich ore ground, particularly when it eschews all dryness and hardness of appearance, so well known to the trained eye of the experienced miner. No rich lodes or veins of ore need, however, be sought for in this rock, but at its junction with the clay-slate. Should a metallic lode or vein appear, under the usual favourable circumstances of good ore-feeding ground, gosseny mixture, decomposing pyrites, sugary spar, &c., it should claim immediate attention. It does not follow from what I have said above that ores may not be found in porphyritic schist. On the contrary, bunches of ore are frequently found in this rock in openings along their cleavage planes; but such bunches by no means constitute a metallic lode. These bunches were formed, are formed, and are still forming, by the ever-active laws of molecular or chemical attraction; and wherever there is room found, and material to be acted on, with no antagonistic elements to neutralise or change the line of action of the atoms or elements of the ores, the accumulative growth goes on, imperceptibly it is true, but, "like the march of intellect," to become finally effective. Miners can almost see this action going on before their own eyes, if they cut vertical sections, through old slime heaps that have not been disturbed for some time, as they will readily perceive veins, beds, and bunches along or in those sections, which though perhaps small, will sufficiently prove that the above active power is efficient for this purpose. As to the material or occult causes of such results, whether electric, magnetic, or electro-magnetic, I shall not inquire here; but refer my readers for lucid and instructive information on this subject, as well as on other exceedingly interesting articles, bearing on geology and mining, to Mr. Evan Hopkins's valuable work on the *Connection of Geology with Terrestrial Magnetism*, and which work, it is trusted, will shortly appear in a new edition, further enriched by the great practical mining experience of this gentleman. Although I am averse to dwell on hypothetical inquiries, it may be excusable in the present instance, supported by observation, and bearing on the above question as it does, to ask, may not the richness of ore veins, or lodes, found in such positions as at the junction of different rocks, or strata, as in clay-slate and porphyritic schist, granite and clay-slate, or kyllas, &c., depend on the superior attraction which the materials of the one rock have for the atoms of ore permeating, perhaps, both rocks on their formations, and that thus one of the rocks is finally left in a hungry state; while the other, though having given its share of metallic pabulum to feed the vein, still seems full and healthy, and ready to fill new mouths, should the miners think proper to leave them open and at rest for a sufficient digestive period? Leaving this question of our subterranean world, however, to the consideration of the societies of occult inorganic creations, I now return to our original inquiries.

The clay-slate of these mountains is highly metalliferous. Its cleavage planes and tabular structure are, in general, the same as those of the great roof-slate veins of North Wales; but it is almost everywhere saturated with sulphurets which, in certain places, have arranged themselves in immense metallic veins, holding rich and abundant deposits of ore, more than sufficient to engage the attention of the intelligent and adventurous miner; but, besides these, there are also courses and lodes of ore, and even mountain masses, to be noticed—all of which, or rather those examined, are found along certain lines of bearing, having a relation to the larger deposits. This mining range extends upwards of three miles from Hendreddu, on the south, to Drws-y-Coed, east of north, taking in the intermediate mines of Cwm Cyprioth, Gilvach, Blaen-y-Pennant, Cwm Trygal, and the manganese region of Llynian, Cwm Silyn, Mynyddal-y-Mignedil, more north. Manganese, copper pyrites, galena, magnetic iron pyrites, and very rich argenteous manganese, are the chief ores that have been worked or noticed; and the extremes of the planes of discoveries are sulphur ores, or mudiic and manganese, near the surface; magnetic pyrites and galena, central; and copper ores, deepest. Before I accompany the reader to an inspection of the internal divisions of these sub-mountain deposits, it may be right to lay down certain preliminary points, which are to be understood as meaning nothing beyond the simple words which are given to define them; and, first, a *mineral vein* in these papers is that substance, earthy, metallic, or otherwise, but all through of the same homogeneous description, which fills an extent in length, breadth, and depth, known or unknown of a rock, or rocks, different in character and qualities from the vein, or material, thus running through the rocks. Thus, we may have a vein of quartz, a vein of carbonate of lime, a vein of iron pyrites, a vein of yellow copper ore, &c., running through clay-slate, granite, limestone, &c., or through all of them, if the vein be long enough. Again, a *mineral lode* is composed of those substances which fill up generally a much wider, deeper, and more extensive space with one or more ores, combined here and there with elementary earths—such as silica in the state of quartz, lime in the carbonated or sulphuretted state, chlorite, talc, &c., and sometimes with portions of the rock, or rocks, through which the lode runs, and, moreover, which lode, or materials, have the rocks on both sides, as *overlying* and *underlying walls*; so that the lode must be understood as if a conglomerated mass of metalline and earthy and stoney matter were to have filled up a great longitudinal or latitudinal fracture, or openings of rocks, to perhaps an unknown depth. It is not necessary, however, that this fracture should be continuously regular, either in exact bearing, dip, or width, as local causes, which miners perfectly understand, may effect much irregularity; but the characters and tendency to regularity must still hold good. Again, veins are of different characters; but their values are generally understood by the adjunct, or prefix, attached to the word itself. Thus a *fugitive vein* is short, and, as it were, fleeting; a *pipe vein* is generally perpendicular, or inclining to perpendicularity, sometimes longitudinal, and always appearing to have swelled out from a small beginning to a wide belly-like shape, and then diminishing, and again swelling out and diminishing, and thus continuing increasing, and decreasing to, perhaps, a considerable depth or distance, or until cut out by some cause, which indeed may be by its own wanton extravagance in its late haunts, or by its being robbed by some cross vein that thought itself more worthy of the treasure it bore, than a creature that at one time was a most pitiful and sneaking miser, and at another a bloated pompous wanton, and "would-be all;" but be not surprised when I tell you that this kind of vein is called in North Wales by the mining *savans* a chimney! However, as I have extended this article a little beyond my usual limits, I shall conclude, for the present, with a quotation, referring to a chimney of this kind, from whence no smoke (?) issued these many years:—

"Sic stit instantur laras."

Cwm Cyprioth Copper Mines, &amp;c., Nov. 17.

ERRATA.—In last article, "segnitic" should be "syenitic."

[To be continued in next week's Mining Journal.]

QUERY FOR SCIENTIFIC MEN.—In what manner does a diamond act upon glass so as to cut it? That it does not penetrate its substance is obvious to any one who will attend to its operations, for it only divides the exceedingly attenuated pellicle on the surface, and penetrates no deeper. The best cut of a diamond is when it makes the least noise in passing a line, and it cuts in the same manner the thickest as well as the thinnest plates of glass. The *Encyclopædia Americana* says—"It is very remarkable that only the point of a natural crystal can be used. Cut or split diamonds scratch, but the glass will not break along the scratch as it does when the natural crystal is used." Again—"the crack is often found to follow the diamond after it has passed several inches. That it does not cut it by dividing the pellicle is clear, because a piece of quartz will do the same by passing in the same line repeatedly, yet will not break true. Then how does the diamond act?"

## THE SLATE STRATUM IN IRELAND.

A report has been forwarded us, in which the capabilities of Ireland to supply slate are put forth, and showing the advantage she possesses over her Welsh neighbours, both as regards the supply and the manufacture when got from the quarry. After tracing the course of the slate veins in Cork, Clare, Tipperary, Waterford, Wexford, and other counties—the conclusion of the writer being that "nothing can be more probable than that the slate strata of Ireland dip under the Irish Channel between Arklow and Wicklow, and rise again in Carnarvonshire"—a calculation is entered into to show the relative outlay of working in Wales:—"The vast superior profit in the making of writing slates and slate pencils (in the county Wicklow, where the best quality for that use abounds), above the profit gained by the English manufacturer, will appear plain from the following items of unavoidable cost to the English manufacturer, every penny of which would be saved by the county Wicklow manufacturer. The principal markets for the sale of writing slates in England, Ireland, and Scotland, are mostly supplied from two or three steam-power manufacturing in Runcorn, Cheshire (one in Warrington, Lancashire, and one or two in London, &c.); all are obliged to make them from Welsh roofing-slates, which have undergone great cost before they are gotten in the state of blocks from Wales, and split besides, which is the way adopted at Runcorn at the following costs—all of which cost, as stated, would be saved by the county of Wicklow manufacturer; and it should be here understood that slate blocks, to split kindly and with little loss, must be split the same day or two days of being quarried from the rock, or the difficulty is great, with great loss of splitting from the hardening effect the atmosphere produces in the blocks:—

|  |         |
|--|---------|
| Cost of blocks per ton in Wales, about         | £0 10 0 |
| " " Freight to Liverpool                       | 0 6 0   |
| " " Do. from thence to Runcorn                 | 0 3 6   |
| Loading and discharging Runcorn                | 0 2 0   |
| Carriage into premises                         | 0 1 6   |
| One-third breakage in splitting                | 0 7 8   |
| Total cost per ton saved in the county Wicklow | £1 10 8 |

Other savings are also alluded to, to tempt the enterprise or cupidity of adventurers, and the articles particularised are, roofing slates and slabs, writing slates and pencils, slate chimney fronts, hearth stones, tombstones, water tanks, milk coolers, carved ornamental slates of various kinds and descriptions; and the south and west of Ireland is declared to be Britain's natural district, if its slate strata were developed in the spirited and persevering way capital has been used in the working of slate veins in North Wales. The report is vouched for by the signatures of Messrs. A. Ashdon, W. Bevan, C. M. O'Keefe, P. and F. McAnaspie, and P. O'Malley; and a letter from Mr. Patrick McAnaspie, one of the signers of the report, is appended thereto, expressive of his opinion that the facts it contains are "profoundly true," a most unimpeachable conclusion, no doubt, since if they were not true they would not be facts at all. Before relying too strongly on the report touching the slate capabilities of Ireland, we should be glad to learn the opinion of some of the English speculators, whose "capital" is called for so loudly.

## THE TIN-PLATE TRADE.

This branch of manufacture at Wolverhampton is affording an illustration of the "strike" system, under the fostering influence of "London delegates," together with the other accompaniments of agitation among the working classes. By the last Number of the *Wolverhampton Chronicle*, we perceive that Mr. Edward Perry, one of the leading manufacturers in the tin trade, had been summoned to the Borough Court for the non-payment of 12. 6s. 3d. wages, alleged to be due to John Cox, a workman in his employ, serving under a written contract. The question at issue was as to the rate of wages to be paid for certain kinds of manufacture; and the amount in dispute was 9d. only—the remainder of the sum claimed having been tendered by Mr. Perry. The case was, nevertheless, important, as the sum involved was in reality 300l. or 400l. a year, being by so much less than the general rates of wages paid in the town. When the case came on for hearing, the summons was withdrawn by the solicitor on behalf of Cox, on account of the non-arrival of a legal opinion from town, and the summons was dismissed with costs, which would not fall upon Cox, but upon the "society," who took up the case in his behalf, and who, in the event of a favourable decision, expressed an intention to "enforce payment for every man in the town, whether hired or not." The ultimate decision is, therefore, looked for with much interest, since on it depends the question, whether the "society" can enforce their list of prices on the general body of manufacturers. A letter appears in the same journal from "Thomas Winters," described as a London delegate, from which it seems that a combination has been entered into among the tin-plate workers to obtain the assent of the leading manufacturers to a uniform scale of prices, in which, previous to November, 1849, great disparity had prevailed. Two of the manufacturers agreed to the terms submitted to them by the workmen; but several others declined according to the scale, and were in consequence the subject of no little obloquy—the "society" agreeing to assist all those who might be thrown out of employment from refusing a lower rate. By another letter, however, from Mr. Richard Perry, it would appear that the grievances of the tin-plate workers are much more of a theoretical than a practical nature.

Mr. R. Perry stated that one of his servants, employed in a branch of the tin trade, had been induced to join the strike, receiving the allowance of 12s. 6d. a week from the society, although previously in the receipt of average wages of 2l. 10s. 8d. a week. He had, moreover, a boy under him, a large part of whose wages he was entitled to receive, and which would raise his earnings to 3l. 12s. 6d. a week; in lieu of which he is away from his wife and family, receiving 12s. 6d. a week to absent himself from their service. "After this statement who," ask the Messrs. Perry, "oppresses or inveigles the workmen? The London delegates, who at present pay them 12s. 6d. per week, and prepare them for the poor-house hereafter, or the masters, who enable them to earn, by honest industry, 3l. 12s. 6d.—a sum which many gentlemen of character would be happy to receive? More than this, they inveigle 12s. 6d. per week (besides their own living) out of the pockets of their dupes in work, by persuading them that the man who can earn 3l. 12s. 6d. is badly off; and they persuade the latter to relinquish this amount, and become their dupe and tool for the paltry pittance of 12s. 6d. per week. We leave your readers to judge who oppresses and inveigles the unfortunate workmen."

In support of their statement, they give an extract from their work-book, containing an account of the wages received by this "oppressed tinman" for the first four months in the year, which fully bears out the average as above given. If the average earnings of the tin-plate workers reach anything like this standard, it results that they are very well paid, and, as far as the delegates are concerned, very badly advised.

THE PARAGON PAINT COMPANY.—Mr. B. Fawcett, a painter, the originator of this scheme, has had to appear in the Insolvent Debtors' Court, where he was opposed by two accountants, named Higham and Tidmarsh. The insolvent alleged that he had a secret to divest paint of any unpleasant smell, and to give it a "perfume." The two opposing creditors exerted themselves to form a company, and to obtain a patent. It was styled "The Paragon Paint Company," and deposits were paid on shares. Prospectuses were issued, and advertisements inserted in the newspapers, and a good colour was given to the proceedings. A capital of 15,000l. was to be raised. It was stated that an expense of about 500l. had been incurred when the insolvent refused to sign the deed of the company, and he was charged with imposing on the parties by gross misrepresentation. On the other hand, he alleged that they wanted to obtain his "secret" without an equivalent. In the course of the case the parties got excited, and one termed the insolvent a "vagabond." The deed of the company was read, and in the early part of the investigation an advertisement and two prospectuses, which had been issued, one to form a company, and the other after the proceedings to accomplish that object had been adopted. Mr. Commissioner Phillips remarked on the style of language used in the prospectuses. It was really astonishing to see how soon such projects were got up. After considerable discussion, the question was fraud or no fraud, and the insolvent stated that he acted on the advice of his solicitor, when he refused to sign the deed. The Commissioner reviewed the case, and was of opinion that there was no fraud proved; therefore, he named a day for the final order, with protection

COAL IN SCOTLAND.—Coal has been found on the estate of Mr. Campbell, of Craigie, and not far from the village of that name. The top seam is 3 feet 8 in. thick, and is of good quality. The Lugar Iron Company have leased the mineral, and will work it.

## COMPANIES PROCEEDING UNDER THE WINDING-UP ACT

ASTURIAN MINING COMPANY.—The petitions before Sir K. Bruce were continued from Saturday to Monday last, and, pursuant to an intimation in Saturday's list, adjourned petitions, of which this case was one, appeared in the list by order of his Honour. However, the opposing party having filed five new affidavits in answer to those of the petitioner, Mr. Russell moved the Court at the rising that the case should stand over till this day. Still we do not think that it will come on to-day, as it stands nearly the last on a very long list, and we believe that opposed petitions will stand over by reason of the usual adjournment of the Court.

NORTHERN COAL MINING COMPANY.—Yesterday, before Master Tinney, the case of Mr. Bagge, M.P., was closed. It was sought to place the representatives of a contributory, named Nettleship, in respect of 400 shares, upon the list. After the death of Nettleship a call was made by the directors, and on its non-payment the shares were declared forfeited.—Mr. Galsworthy contended that, under the deed, the directors had no power to forfeit shares.—His Honour decided otherwise, and the parties were struck off.

COMPRESSED AIR ENGINE RAILWAY COMPANY.—With reference to a paragraph which appeared in the *Mining Journal* of Saturday last, stating that the scheme for working locomotives with reservoirs of compressed air instead of by steam did not answer, Mr. Parsey, the inventor, states that his patent for working locomotives by compressed air was never tried beyond his models, which did answer, and that upon the exhibition of them, the above company received 8283l. for the registered object only of building a large-sized engine, and testing its efficacy by the 24 December, 1849. He further states, that with the exception of the delay, and spending the shareholders' money in solicitors' and office expenses, the company did nothing, and the invention still stands on its original and unquestionable merits. That the company never attempted to build an engine, and they were obliged to pay him a sum of money as a compromise on the 18th of January last, and to deliver up the approved models, pumps, &c., and to re-assign to him his patents for not proving that it would not answer.

DOVER, DEAL, AND CINQUE PORTS RAILWAY.—The meeting before Master Brougham on Monday, was to consider the claims of creditors, the list of contributories having been settled. Mr. Croysdill, the official manager, reports that there is due from the South Eastern Railway Company a sum of 8685l., the amount of an undertaking from that company to defray the expenses incurred in the event of the Bill of the Dover and Deal Company not being obtained in Parliament, for which a verdict had been obtained against the chairman, and which had been paid into Court. This, if paid, with a balance of 1334l. still standing in the Commercial Bank, will, it is expected, enable the official manager to declare a dividend of 20s. among the shareholders.

DIRECT LONDON, CHICHESTER, AND PORTSMOUTH RAILWAY.—On Saturday, Master Richards proceeded with the settlement of the list of contributories in this company, brought in by Mr. Wryght, the official manager, and Mr. Harris, solicitor to the estate. The first class of shareholders consists of those who paid the deposit of 2 guineas a share; the second, of those who paid the deposit of 20s. a share; the third, who paid 10s. a share; and the fourth, of those who paid the deposit of 2 guineas and received back the letter of allotment on payment of 2s. a share; and the fifth, of those who had not paid the deposit or signed the deed. The adjourned cases on the 4th list were taken. It appears from the investigation of the official manager, that out of the 95,000 shares allotted only 1000 were paid upon. The outstanding claims, most of which are disputed, amount to about 7000l. The directors received about 6000l. for deposits.

SOUTHERN COUNTIES UNION AND BRISTOL, BATH, AND DOVER RAILWAY.—Master Kindersley has appointed Mr. Adon official manager to wind up this company's affairs.

GREAT NORTH OF ENGLAND AND YORKSHIRE AND GLASGOW RAILWAY.—On Tuesday, Mr. Harding, the official manager of this company's affairs, filed with Master Blunt the list of contributories liable to pay off outstanding claims. It consists of 60 provisional committeemen, and 800 shareholders, who paid the deposit of 2l. 12s. 6d. per share, resident chiefly in London and the north of England. About 1600 persons, who were merely allottees, and who paid nothing, have, at the direction of the Master, been excluded from the list.

THE OXFORD, WORCESTER, AND CHESHIRE JUNCTION RAILWAY.—On Thursday the settlement of the affairs of this company was opened before Sir G. Rose. From the report of Mr. Turquand, the official manager, it appeared that the public applications for shares in this line amounted to 294,000. Out of the share capital of 100,000 shares, only 41,770 were allotted, which included 10,550 to the members of the committee of management; but deposits to the amount only of 15,000l. were paid, the greater part of which was spent in preliminary expenses. The "reserves" to be allotted among 107 of the provisional committee were put down at 150 shares each, for 16 of the managing committee 500 shares each, promoters 3000, and a special "reserve from the public" of 30,000 shares. It is now sought by the official manager to charge each of the provisional and managing committee for payment of the deposit on as many of these shares as they appropriated to themselves. A resolution was passed, limiting the number of the first allotment to 100 shares, and stating that 150 should be reserved. Mr. Cairns contended upon these grounds that Mr. Peter Morrison, chairman of the allotment committee, ought to be held liable. His Honour, after hearing the evidence, and intimating that it made out a strong case for making that gentleman liable, said he would take time to consider. The rest of the list contains the names of about 200 persons who paid the deposit and signed the deed, or only did the former, the mere allottees of shares not being included in it. The official manager, on behalf of the shareholders, contends that the reserves of shares was unfair, and that no complete allotment was, consequently, ever made.

THE MARYLEBONE BANK.—On Monday, Master Kindersley further proceeded with the settlement of the list of contributories in this company, which is now nearly settled. The outstanding liabilities of the bank to be discharged are estimated at 25,000l.; and it is computed that the expense of winding-up its affairs will not probably fall far short of doubling that amount. The number of shares which will be rendered liable in respect to any call to be made to pay off the liabilities, amount to between 2000 and 3000. On Monday a long argument took place in connexion with the case of Mr. Brooke, Hamersmith, whom Mr. Hetherington, counsel for Mr. Kempshad, the official manager, sought to place on the list as a transferee of five shares to Mr. Riley, since an insolvent, and of whom, under the insolvency, the bank had bought the shares. Another question raised was, whether Mr. Brooke was a shareholder of the company; and his Honour having decided in the affirmative, 30l. having been paid in respect of calls and dividend received, reserved the question of liability on the subject of the transfer, about the facts of which he thought there was no moral doubt, until further evidence was produced as to its validity, and its having been done in accordance with the form prescribed by the directors.

BOSTON BATH COMPANY.—On Monday, Sir William Horne, having settled the list of contributories, Mr. Head, the official manager, stated that in order to pay off the liabilities a call of 15l. per share on 250 shares would have to be made, amounting to about 3750l.; in making this call credit will be given to those who paid 5l. per share. The promoters of the undertaking expended considerable sums in building on two acres of ground, and in boring for spa and mineral springs in Boston.

PATENT CONCENTRATED TEA COMPANY.—Petitions have been presented by the shareholders for winding-up this company's affairs.

SEA, FIRE, AND LIFE ASSURANCE COMPANY.—On Tuesday, Master Tinney was attended by Mr. Ernest, the official manager, and by Messrs. Galsworthy, solicitors to the estate, on the subject of the claims of creditors, which amount altogether to about 12,000l. A large number of persons connected with ship insurances, and at Lloyd's, are concerned in the settlement of the affairs, and an important question arises between the Port of London Assurance Office and this company, as regards an alleged amalgamation of the two undertakings. The petitioner for winding-up, Mr. J. Richmond, C.E., states on affidavit that its promoter, Augustus Collingridge, absconded, and left England in April, and that the business, which commenced in 1849, after incurring various liabilities, was discontinued in May, 1850. A call of 20s. per share was made by the directors, Messrs. Collingridge, Alexander Davis, Howel Gwyn, M.P., and Sir W. Ogilvie, on the proposed capital of 100,000l., but a large portion of the shareholders refused to pay it. Negotiations are going on with the late solicitors of the company for the delivering up of the books and papers, on which they allege they have a lien of 5000l.

BRITISH AND AMERICAN STEAM NAVIGATION COMPANY.—An official manager of this company's affairs, to which the unfortunate steam-ship, *President*, belonged, is to be appointed.

BRITISH AND FOREIGN GAS LIGHT AND METER COMPANY.—Creditors are to come in and prove their debts.

RUGBY, WARWICK, AND WORCESTER RAILWAY.—On Friday, Master Richards finally settled the list of contributories, deciding in one case that where shares had been deposited with a party to secure money upon mortgage, he having received back a portion of the deposit, that that party was liable to be placed upon the list.

MADRID AND VALENCIA RAILWAY.—The proceedings before Master Blunt occupied the entire of yesterday, and were not concluded on the rising of the Court. It was rumoured that the official manager had made application to the Spanish Government for authorisation of a restitution of the caution money originally lodged with the bankers at Madrid, and that the Government had given an order for its return, which will on its being obtained come in as assets under the estate, to be divided amongst the shareholders.

INSOLVENTS UNDER THE WINDING-UP ACT.—The Lord Ordinary of Edinburgh has suspended the discharge of one of the directors of the Royal Bank of Australia, who applied to him under prospective pressing liabilities connected with it, until March next, on the ground that if the statement of the accounts



